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OPERATIONAL ASPECTS OF AIDS RESEARCH AND MEDICAL CARE WITHIN THE VETERANS' ADMINISTRATION

HEARING

BEFORE THE

SUBCOMMITTEE ON
HOSPITALS AND HEALTH CARE

OF THE

COMMITTEE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

FIRST SESSION

August 21, 1987

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OPERATIONAL ASPECTS OF AIDS RESEARCH AND MEDICAL CARE WITHIN THE VETERANS' ADMINISTRATION

August 21, 1987

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:19 a.m., at the Veterans' Administration Medical Center, San Francisco, California, Hon. J. Roy Rowland, presiding.

Present: Representatives Rowland of Georgia and Gray.

Dr. ROWLAND OF GEORGIA. The hearing will come to order. First, I want to recognize the Representative from this area for any opening comments that she may have, my good friend and colleague, Nancy Pelosi.

OPENING STATEMENT OF HON. NANCY PELOSI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. PELOSI. Thank you, Mr. Chairman. First of all, I would like to ask unanimous consent to have my entire statement in the record so that I will not have to read it this morning.

Dr. ROWLAND OF GEORGIA. Without objection.

Ms. PELOSI. Thank you. I do want to welcome Congressman Rowland and Congressman Gray to San Francisco. I applaud Dr. Rowland's activities on behalf of all of us who are concerned about the AIDS issue, for his work with the VA, and for his work on the AIDS commission for which he has garnered bipartisan support in the Congress.

I also want to welcome the Members of Congress on the Veterans' Affairs Committee to San Francisco. I want to particularly thank them for the time that they took in addition to bringing me with them to visit the VA hospitals which was a happy enlightenment, to visit San Francisco so that we could tell them about some of the resources that we have here which have been helpful in the fight against AIDS. Now, when national policy is made, it will be made in light of some of the good model programs that San Francisco has to offer.

Again Dr. Rowland and Congressman Gray, I welcome you, and I thank you for your interest. As I said earlier, it is a ray of hope for those of us who are concerned about AIDS in San Francisco that the VA is taking such an interest in the issue. It will enable us to conquer the disease and enable us to get the votes in Congress to

have the funding and legislation necessary to do it in a way that does not lose humanity for any its victims. Thank you very much.

[The prepared statement of Congresswoman Pelosi appears on p. 35.]

OPENING STATEMENT OF HON. J. ROY ROWLAND, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Dr. ROWLAND OF GEORGIA. Thank you, Nancy. I want to introduce for your information other people here. Jeff Gleason, who is with the minority staff on the Subcommittee on Hospitals and Health Care. Vic Raymond and Jack McDonell, both of whom are on the majority side of the staff of the Subcommittee on Hospitals and Health Care.

I am going to recognize the Congressman from Illinois in just a moment. But first let me just welcome all of you to the Committee on Veterans' Affairs and Subcommittee on Hospitals and Health Care hearing this morning concerning the acquired immune deficiency syndrome.

This hearing is the second hearing that we have had related to AIDS, and the purpose of the hearing is to investigate the operational aspects of AIDS research and medical care within the Veterans' Administration and the relationship of the Veterans' Administration to the public and private sector. Experiences in meeting treatment demands of AIDS patients in VA facilities and the communities and through the VA and the Department of Defense sharing agreements will be emphasized as a part of a developing national policy on AIDS.

I think that it is altogether appropriate that this subcommittee is involved in the public health crisis that is presented by AIDS. The Veterans' Administration is the largest health care system in the United States and in fact in the western world. And, as such, it has been conducting research and treatment in over 2,000 cases of AIDS since 1983. And this caseload is expected tc escalate to about 12,000 by 1991.

I think that San Francisco, perhaps better than any other city in the world, understands what these numbers mean in terms of resource demands and personal anguish.

In fact, I do not think we have ever faced a disease that is so deadly, and so rapidly spreading, and with such complex moral, legal, and political ramifications as AIDS. The level of emotion, the diversity of opinion, and the intensity of philosophical arguments which have come to dominate the discussions and the debates regarding a national public health response partly result from a lack of knowledge and from fear. As a physician and as an elected Member of Congress, I believe it is time that we move forward away from this atmosphere of fear and ignorance.

The real problem is to determine how to move forward. And, toward this end, I introduced legislation that has now been passed by the House of Representatives. This legislation is H.R. 2881, as amended, which would establish a 15-member national commission to consider and advise the Congress and the President on the appropriate roles for Federal, State, and local governments as well as the private sector regarding AIDS research, testing, confidentiality

of test results, treatment and care of AIDS patients, prevention of transmission, education, and discrimination.

The commission's membership would include recognized experts in the scientific and medical communities and in legal and ethical areas. I envision this commission as successful as the panel formed in 1983 to salvage the Social Security System which was a bipartisan approach where personal interests and partisan politics were put aside in solving this societal problem that we have.

Some people have asked how this commission would differ from the panel appointed by President Reagan. H.R. 2881 has three important characteristics which are different from the President's commission. First, the membership would include recognized experts in medicine, and science, and law, and ethics. Second, the commission would report to the Congress, the legislative branch of the Government, and that is so very important, because that is where funding comes from for various programs. And third, the commission would last for at least 2 years and possibly an additional 2 years. The President's commission terminates in 1 year.

On behalf of the committee, I want to thank our witnesses for taking the time to be with us here today. I have been very impressed with the dedication and intellect that characterizes the work of our witnesses today as they have grappled with this epidemic. The lessons that they have learned are valuable and should be disseminated across the nation. The commission created by H.R. 2881 as amended I think is a good vehicle for that purpose.

I am pleased to chair this hearing today on behalf of the distinguished Chairman of both the full Veterans' Affairs Committee and the Subcommittee on Hospitals and Health Care, the Honorable Sonny Montgomery. I would like to thank Dr. Ditzler personally, and on behalf of the subcommittee, for all of the assistance that he has given in preparing for this. Dr. Ditzler is the Director of the VA Medical Center here in San Francisco, and previously served as Chief Medical Director of the VA. Thank you, Dr. Ditzler.

Now I want to recognize the Honorable Ken Gray from Illinois, a hard working member of the committee, and a person I have come to be very fond of. He has been in the Congress for a good many years now, and he has a longstanding dedication to veterans. Ken, I really appreciate you being here today.

[The prepared statement of Congressman Rowland appears on p. 37.]

OPENING STATEMENT OF HON. KEN GRAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. GRAY Thank you, Mr. Chairman, Nancy, and to our staff. It is a great joy and privilege to be here. And as I stated in the press conference earlier this morning, we are here to try to learn as well as to reassure not only the veterans and this great institution where we are holding these hearings but all of society that Congress is really committed to finding the answers to this heinous disease AIDS.

I spoke with the Speaker of the House, Jim Wright, who is a classmate of mine—now you know how long I have been in Congress—I came to Congress in January of 1955. He is committed,

and also the chairman of the Subcommittee on Appropriations, Mr. Natcher of Kentucky, whose committee funds research, and also one of the very illustrious members of the delegation, Congressman Waxman, who heads up the Subcommittee on Health. Members on both sides of the political aisle are committed to trying to find and to fund the money for this problem.

Mr. Chairman, I am known to talk too long, and we need to get on and hear from these witnesses. I want to thank you so much for coming out here and allowing me to come with you. Nancy Pelosi, of course, has been a very, very integral part of our efforts on the House floor, along with Congresswoman Boxer, and many others that we could mention here by name. The citizens of this city are lucky to have someone of Mrs. Peloski's knowledge and dedication representing them in the Congress.

All of us together have pledged to really get with it. And whatever it takes, we are going to provide that resource. Thank you, Mr. Chairman.

Dr. ROWLAND OF GEORGIA. Thank you, Mr. Gray.

Nancy, thank you very much for all that you have done to help make this so productive for us. Congresswoman Barbara Boxer was unable to join us this morning, but she has submitted a statement for the record. Without objection, that statement will be made part of the record.

[The prepared statement of Hon. Barbara Boxer appears on p. 40.]

Dr. ROWLAND OF GEORGIA. Dr. Schmid, we are pleased to have you here this morning, and it is a real honor to have the opportunity to meet you. We would ask you to proceed in any way that you so desire.

STATEMENT OF DR. RUDI SCHMID, DEAN, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA AT SAN FRANCISCO

Dr. SCHMID. Thank you very much. Honorable Congressmen and Congresswoman, I am really honored to be invited today to testify before you. I am Rudi Schmid, professor of medicine and Dean of the Medical School of the University of California, San Francisco, the Chair of the VA Medical Center's Deans Committee, and I am a Member of the National Academy of Sciences.

I was born in Switzerland where both of my parents were physicians in a small mountain town, and I came to this country in 1948, and did all of my post-graduate training in some of the leading medical institutions of this country. And, I am a specialist in liver disease and liver function.

AIDS is rapidly assuming the dimensions of a national epidemic. Unless all predictions are in error, 1 to 3 million cases will be among us in the mid-1990's, and it will be a national emergency dominating all other health issues. Because of its high and protracted morbidity and its predominant target of younger people and infants, it is likely to dwarf cancer and most likely heart disease in its impact on health care economics in the near future.

It is apparent that the infection is moving out of the homosexual population and being increasingly transmitted by heterosexual contacts, by transfusion of blood and blood products, and by parenteral

drug use. And it is unlikely, unfortunately, that effective protective vaccines will become available in the foreseeable future.

It is possible that drugs or biological substances that may retard or temporarily reverse the disease may be developed in the near future. But it is unlikely, as I have said, that a cure or complete protection against infection will be soon in sight. And, I believe that mandatory antibody testing is of questionable usefulness for controlling the spread of the infection.

San Francisco is the second largest epicenter in the country after New York City. Last month, we had a 50 percent increase of cases in the city and county of San Francisco over the preceding months. Our health director, Dr. Werdegar, Professor of Family and Community Medicine of the University of California, San Francisco, and currently on leave, (and I hope some day he will come back) will provide you with more details on the AIDS epidemic in the city and county of San Francisco.

All hospitals in San Francisco are involved in AIDS care under the leadership and coordination of the San Francisco General Hospital—one of the three closely integrated teaching hospitals of the University of California at San Francisco School of Medicine.

The San Francisco General Hospital is one of the world's leading centers of AIDS research and care with over 35 faculty members researching and working on AIDS-related problems. And there are some 20 more faculty members in this institution and at the University Hospital. So we have a whole army of our best investigators occupied with the problem of AIDS.

The San Francisco Veterans' Administration Center itself is deeply involved in the AIDS problem. There are over 200 active cases which are being cared for at the VA Medical Center here, in part in the in-patient service and in part in the clinics. This number is likely to rise in the near future. It clearly represents a significant patient load and an important cost factor for the VA Medical Center.

AIDS research and care at the VA Medical Center is coordinated by Dr. John Ziegler, who is Associate Chief of Staff, Professor of Medicine, and at the same time Director of the entire clinical AIDS Research Center for the UCSF School of Medicine. So the Chief of our medical school research effort on the clinical side is situated right here at the VA Medical Center.

I believe that the AIDS problem provides an excellent illustration of why it is so uniquely beneficial for the VA Medical Center, for any VA Medical Center, to be closely affiliated with a strong medical school, and to be under the direction of a deans' committee with a deeply involved commitment by the medical school and a fully developed teaching and research program.

There is no way that the VA Medical Center could deal adequately with the entire AIDS problem were it not for its close interaction with the School of Medicine and particularly with the San Francisco General Hospital. The optimum care for veterans with AIDS requires that the VA staff be part of the larger AIDS team of the USCF School of Medicine and the San Francisco General Hospital, including direct access day and night to all of the front line research results and all of the tests which are being developed in this great center.

For example, Dr. Ziegler and his associates are in daily contact with the various research teams, and in turn they are performing essential components of the research effort of the UCSF School of Medicine.

It is really a two-way street. The VA Medical Center and its staff of health care workers are benefitting immensely from the medical school, and the medical school critically depends on the VA Medical Center for many of its educational, scientific, and health care programs. It is a marriage made in heaven, only in this case in Washington, whose dissolution or divorce would enormously hurt both parties.

But each partner needs to contribute its part and its share of research and development work. The best research and the best teaching equals the best patient care.

The UCSF School of Medicine is one of the country's leading medical schools, ranked in the top two or three. And the San Francisco Veterans' Administration Center is one of the shining jewels in the VA Hospital System, a hospital that ranks among the very top U.S. teaching and research institutions.

Thus, we are very proud of this institution, a pride that we want to transmit to you. No other country, not Japan, no country in Europe, and neither Russia nor China has created something even remotely resembling what we have here, an institution that provides our veterans with the very best medical care available in the world.

The VA Central Office is setting up a small number of AIDS research centers in VA Medical Centers throughout the country. It would seem to me logical and indeed inescapable that one of these centers be located in San Francisco. Not only is San Francisco one of the world's three to four leading AIDS research centers, but the San Francisco VA Medical Center has a unique and pioneering program in intestinal immunity about which you will hear some more from Dr. Jones. The field, which is highly specified and specialized, is concentrating on the ways in which the AIDS viruses enter the body through the gastrointestinal tract through the mucosa to cause the deadly disease.

So we already have all of the research resources, we have all of the trained investigators, a large patient population, and the enormous potential of the medical school to make this an institution here at the VA Medical Center if we were to get an AIDS center, which would certainly help in the search for a solution to this catastrophic national plague that is upon us.

I would like to recommend to the U.S. Congress that it lend its strongest support to building up the AIDS research and care programs in the VA medical system, and to selecting the San Francisco center for the location of one of the new centers. I am absolutely confident that it will be tax money very well spent for the sake of coping with the horrendous plague that has befallen the world and the nation. Thank you very much.

[The prepared statement of Dr. Schmid appears on p. 42.]

Dr. ROWLAND OF GEORGIA. Thank you very much for that very excellent testimony. Although everyone here knows you, I neglected to mention, and I will mention it for the record, that you are the Dean of the School of Medicine at the University of California.

I am so pleased to hear you speak of the close working relationship between the Veterans' Administration, the medical school, the university, and the general hospital here, all working together.

I am very pleased about that. I am also very pleased to hear you mention Washington and heaven in the same breath. A lot of times people do not do that.

Dr. SCHMID. Well, I have to give you a little bit of a lift, you see.

Dr. ROWLAND OF GEORGIA. We need all we can get. Let me ask you just one or two questions, Dr. Schmid.

What is the approximate total number of dollars, the dollar amount of joint or cooperative AIDS research activities between the VA and the University of California, San Francisco?

Dr. SCHMID. Well, that is difficult to say, because it comes from so many different pockets between the city, the State, the Federal Government, and the VA Central Office. I think that would be in excess of $30 or $40 million.

Dr. ROWLAND OF GEORGIA. I am pleased to know that it does come from many different pockets, because I think that is important. Everyone has a vested interest in what is taking place.

Would you describe the process used to control the research funds supporting this joint cooperative research activity between the VA and the University of California?

Dr. SCHMID. The medical school is closely affiliated with three hospitals, major teaching hospitals, including the VA Medical Center, the University Hospital at Parnassus, and the San Francisco General Hospital with its Clinical AIDS Research Center, which, as I have said, is directed by Dr. Ziegler, and that is for the total effort.

The funds which come through that center are allocated on the basis of projects, scientific projects, which are described in detail, and submitted to the committee, the executive committee, which runs the center. And then they are evaluated by peer review—and we emphasize always very strongly peer review: for quality, for promise, for scientific value, and merit.

And then the budget is looked at, whether it is necessary to have these monies available to carry out the project. And then the funds are allocated on the basis of a competitive priority rating.

There are also funds available from the State through the University of California, and there we have a task force which is system-wide for the whole university. And that task force is chaired by the Chairman of the Medical Services of the San Francisco General Hospital, Professor Merle Sande, and there a similar process is involved.

There is an application and description of the research projects, and then a scientific peer evaluation, priority rating, and then the funds are allocated if it seems to be appropriate in terms of the promise, the scientific promise, and the importance of the work to be carried out.

Dr. ROWLAND OF GEORGIA. There is an interchange between that and this hospital here?

Dr. SCHMID. Oh, there is an interchange, because they sit on each other's committees.

Dr. ROWLAND OF GEORGIA. Very good. Mr. Gray.

Mr. GRAY. Thank you, Mr. Chairman.

I want to thank you, Dr. Schmid, for coming out. I know that you are very busy, and we appreciate so much your helping the committee to obtain this information.

You mentioned a moment ago that your specialty is in the liver. We read a lot about intravenous drug users being more susceptible to AIDS.

What about cirrhosis of the liver and all, do you have any studies at all as to heavy drinkers that might have say a weak liver, are they more susceptible to getting AIDS, have you had any studies along those lines? I never hear of alcohol and AIDS being related. We hear a lot about IV drug users and AIDS being related.

Dr. SCHMID. There are no direct studies on evaluating pre-existing liver disease in terms of the susceptibility to AIDS.

Mr. GRAY. I am thinking in terms of hepatitis and cirrhosis of the liver where someone is in a weakened condition. I wonder if they are more susceptible.

Dr. SCHMID. Well, you are absolutely right insofar, of course, as to hepatitis-B about which you know a lot, because Congress has been involved in that question, too. The transmission of hepatitis-B and the transmission of AIDS have great similarities. And frequently individuals with AIDS, particularly the drug users, and to some extent the homosexual population, have both. They have hepatitis-B, positive hepatitis- B, and they are also positive for AIDS. Because as I have said, the transmission is similar.

And frequently, hepatitis-B is relatively latent and dormant. It may damage the liver, but it may damage it in a very slow and very sort of protracted way. Now to what extent that changes the AIDS clinical manifestations is really very difficult to say, because it is almost impossible to sort that out in a controlled way, since each patient, after all, is an individual. It is difficult to put patients into classifications, because they are so individualized that you have to look at each one as an individual disease process. So I could not really answer your question. I would not be surprised.

Mr. GRAY. Is any research being done, Doctor, on that?

Dr. SCHMID. Well, the research is being done along two lines. The first one involves looking at patients who develop AIDS, who already have a weakened immune system, a defense system, for other reasons. And they clearly have a different clinical manifestation of the disease.

And the other one, which I think is going to be very interesting, are the studies that I have already mentioned in this very medical center. We have a highly specialized team here which is studying the mechanisms which permit viruses and bacteria which have been swallowed, (and we swallow billions of them every day) how they enter the body or are prevented from entering the body through the lining of the gut. That is a very, very interesting and almost a poorly understood mechanism or mechanisms, most of which have been elucidated here.

I believe that this has been the pioneering place, this very medical center. And I would think that if they get an AIDS center, that that would be one of the major things to look at. Why does the virus go through certain linings and not through others? Why does it seem that the lower intestinal tract is particularly susceptible to virus transport into the body whereas other mucous membranes,

perhaps the mouth, perhaps the tongue, and perhaps the oral cavity seems to be more resistant? We have no idea why that is. If we knew that, I think that we would know a lot more about what we possibly could do to prevent infection in individuals who have been exposed to the virus.

Mr. GRAY. You and our distinguished Chairman very succinctly pointed out the tremendous cooperation between the Veterans' Administration and the University of California.

On the problems of funding, I might tell a little humorous story about Laurel and Hardy. Laurel said to Hardy, if he had $50 in one pocket and $50 in the other pocket, how much money would he have. And he said I would have on somebody else's pants.

The analogy that I am drawing here is that I have talked to the director here and he claims that they are robbing Peter to pay Paul, the Office of Management and Budget. If you get $100 million say for AIDS research, they make you take that out of some other operating account.

Are you finding the rob Peter and pay Paul syndrome at the University of California where they say yes, we recognize that this is a problem, and yes, we want you to go forward, but you will have to cut back here on employees doing other research in other fields, the catastrophic illnesses research as an example, are you finding that?

Dr. SCHMID. So far, Congressman Gray, that has not been a major problem. I think that the various political territories, the city, county, State and Federal have enough insight to recognize that AIDS is such a problem that they have to give supplemental funding, and so far that has happened.

I think that it would be an absolute disaster if that were withdrawn or taken away from funds from the very meager and restrictive research funds which are available to the nation. You know undoubtedly that in terms of support of basic research, (and that is where the information comes from) we are far behind and falling more and more behind per capita in support to Western European countries, France, Germany, Italy for instance, even Spain, and Japan. And if we do not do better, it will bode very, very badly for our potential in the years to come.

So if the AIDS research were taken out of the general pocket, I think that it would be an absolute disaster. So far, this has not been the case.

Mr. GRAY. We have a great organization known as the Office of Management and Budget in Washington, and Congress can appropriate funds but OMB has to turn them loose. Many times they spoon feed these programs. You say here is $985 million, and periodically they will wait until the last quarter so that you can throw it into a new fiscal year to get the money out. And of course, we will ask questions of the other witnesses when they come on shortly after you.

But I was wondering if you had any problems in the State of California? I know that some are having some problems with the OMB in Washington.

Dr. SCHMID. The OMB is a problem. There is no question. It is openly recognized. It always reminds me of my parents who gave

out pocket money in dimes and nickels rather than a dollar bill, because it somehow seemed to go further, you see.

Mr. GRAY. I know what you mean.

Dr. SCHMID. But in the State of California so far, we have been fortunate enough to have an administration that has been showing a lot of insight into the problem. And I also should say that we have had relatively few problems between the federally funded VA Hospital and the state funded University of California, although there is every opportunity for friction. Because when you have three institutions, one funded by the city, the general hospital; one by the State, the University Hospital; and one by the Federal Government, the VA; obviously, this is a blueprint for problems.

With the help of the various administrations, this has been minimized. I am not saying totally, and there are little things cropping up all the time. But it is not a major problem, and with goodwill it can be solved. It is very difficult to account in exact dollars who benefits on both sides. The Veterans' Administration, or at least some people in the Veterans' Administration, sometimes feel like the university gets a free ride. And the university thinks that the VA gets a free ride from university funds.

Mr. GRAY. I thank you for your candid answers, Doctor. Thank you, Mr. Chairman.

Dr. ROWLAND OF GEORGIA. Thank you, Mr. Gray. Ms. Pelosi.

Ms. PELOSI. Thank you, Mr. Chairman.

I, too, want to thank you for your fine testimony, Dr. Schmid. You partially answered my questions in answering Congressman Gray. My question was regarding AIDS related research activities in which your institution is currently participating.

Is there anything that you would like to add to your remarks about intestinal immunity, what the team is doing on that, the mechanisms and studying the immune system? Is there anything else that you would like us to be aware of? The reason that I am asking it is in light of my next question, which is do you think that more money can be spent on basic research if the money were available?

Dr. SCHMID. Well, Congresswoman Pelosi, the answer would be that we are very short in support of basic research nationally. I believe there is no question that we should do more and that we should do more particularly in education, because the number of people who are entering the fields of science, of biomedical science, and of the life sciences is dropping.

I looked last night at the publication from the National Academy Round Table, of which I am a member, which summarizes these figures. And it is alarming to see how we are falling behind per capita in the number of PhDs which we are training. And in engineering sciences, for instance, we give more PhDs to foreigners than we give to American citizens. And that I think is an alarming situation. It is not quite that bad in the life sciences, but it is dropping.

And yet the projections are that over the next 20 years we will have a very great need for new PhDs and MDs trained in medical science, because the enormous increase in university faculties which happened in the 1950's and 1960's will be reaching retirement. And we will have to replace an estimated 40,000 faculty

members on medical school faculties. And if we do not have the people and we do not have the trained people, we simply cannot do it. I think that the Congress should really pay attention to this.

Now in terms of AIDS research, I think that the funds available at the present time are adequate. I am not saying that they are lush, and I am not saying that with some more funds that we couldn't do a few more things, but I am not complaining that we are currently starving for funds.

What is important is that there must be some sort of a long range commitment. Because you cannot hire the best researchers and you cannot expect your best investigators to switch to a new field if they do not know and have no assurance that a year from now, or 2 years from now, or 3 years from now, the funds will be available to support them.

So it is more a question of projected long-term support and availability of emergency monies if there is a breakthrough, so that you do not have to go from two years and apply to the NIH before you get some funds. It is more a question of that than of the absolute amount. I think that the absolute amount available through the various pockets at the present time is adequate.

Ms. PELOSI. Thank you, Dr. Schmid. Thank you, Mr. Chairman.

Dr. ROWLAND OF GEORGIA. Thank you very much.

Dr. Schmid, we are really very grateful for your testimony.

Dr. SCHMID. Thank you very much.

Dr. ROWLAND OF GEORGIA. Thank you for coming this morning.

I would like to call next Dr. David Werdegar, the Director of Public Health for the city of San Francisco. Thank you very much, and good morning to you. We are so grateful to you for being here this morning. I understand you do not have a prepared statement, you may proceed in any manner that you so desire.

STATEMENT OF DR. DAVID WERDEGAR, DIRECTOR OF PUBLIC HEALTH, CITY OF SAN FRANCISCO

Dr. WERDEGAR. Thank you very much, Congressman Rowland. As Dean Schmid indicated, I left an academic career chairing the Department of Family and Community Medicine 3 years ago at the request of the mayor to become Director of the San Francisco Health Department, which has been the focal point for our planning and developing a coherent AIDS program over time.

Let me just say, Congresswoman Pelosi, I salute you for so swiftly after joining the Congress becoming involved with the AIDS issue, which is of course a major issue of our community as I will described.

And to Congressman Rowland, I would say that as the only physician in city and county government, I have some sense of what is must be like to be the only physician in the Congress. It is at times lonely, but a good deal of fun and a very nice responsibility. And I am really impressed that you bring your physician-hood into the Congress.

Congressman Gray, we are glad to have you on the side of the AIDS battle. I did appreciate your comments about the fact that it will take a very strong national commitment over the next number

of years to contend with what is going to be our leading health problem in the Nation, if it is not already.

Sadly enough, there is no community in the United States that has been so severely affected by AIDS as San Francisco. And the coming years, we can see, are going to be quite rough, because this is an illness where the illness appears many years after the original infection. We know that in San Francisco, which is really a small community, a small city of 700,000, that we have some 40,000 individuals who are affected, and that over time, they are likely to become ill.

It is really called the holocaust by our gay community who each day see friends of theirs come down ill and die. Last month, as Dr. Schmid said, we had 143 new cases of AIDS for the month. Each month, we see something of that order, 125 and 130 new cases.

Now there are whole cities, counties, and States that would be surprised to be taking care of 143 cases total, and we have 143 new cases in a month. We have had 3,500 cases since we began to count in 1981, and two-thirds of those individuals have died.

Our own studies have shown that if you follow over time an individual who has become infected, for which the evidence is having turned antibody positive on tests, at the end of 7 and one-half years, we have this very long study of the natural history of the illness, at the end of 7 and a half years, 80 percent of the individuals who are antibody positive have either developed AIDS, or AIDS-related conditions, or some other early manifestations of the disease. And actually of the 80 percent, virtually half of them have developed AIDS.

So over time, this is a very strange disease. There is a very long period between infection and coming down with illness. I think that has in a way lulled us as we look at the epidemic. The epidemic has constantly been under estimated. If I have any rule that I apply to myself as I go about my planning as a health director, it is really to say that whatever we understand about the epidemic at the moment is probably an under estimate of its true enormity, and I had better build in a factor for the things that I do not know.

In order to cope with an epidemic of this proportion in San Francisco, it has required a highly integrated planning process that brings together all sectors, the public sector, the private sector, and the voluntary sector. It has to cut across the community of gay and straight, black, Hispanic, and Asian, and to make everyone realize that they must all be part of the AIDS effort.

I think that if we had a message to declare to the rest of the country, it is that it requires that degree of coherent planning, that degree of togetherness, and of recognizing that we are all in it together, and that we must all help one another. That is what must take place on a national scale.

These meetings are very important, I think, because as Congressman Gray said, the VA system is the largest health care system in the Western World, and so it obviously must be a full partner in a coherent national program on AIDS. It has among its clients many who will fall into the group, who are either at risk or already affected by AIDS. And that will include minority groups, many who have been substance abusers, and many who have used alcohol. We have found, at least in terms of safe sex practice, the disinhibition

from alcohol is a factor there. But in substance abuse, IV substance abuse, it is, of course, the introduction of the virus through the use of needles that has been one side of the scourge of the epidemic.

In San Francisco, the epidemic has been mainly thus far amongst the gay and bisexual population, although that is changing and we are concerned about those who are substance abusers. In the eastern half of the United States, the epidemic is now overwhelmingly an epidemic among IV drug users. And collectively, the country is going to have to face that problem.

The gay community organized itself early on with help from the health department and with political support. It was a foundation within the community, the AIDS Foundation, which mainly was made up of representatives from the gay community, so you had individuals speaking sort of, by and for the people, which is what you need. If all of the messages came from the health department, health education messages, that would not have sufficed. It had to come from the community affected.

This model incidently will apply to the Hispanic community, the Black community, and the Asian community. You must have an involvement of the communities.

But let me say to show what can be accomplished on the bright side is that last year we have several surveys to show the rate of new infections. The rate of new infection in the gay population in San Francisco last year was less than one percent. And in one of the three surveys, it was zero.

And I offer this as evidence that what we are doing in the way of education, use of anonymous and confidential testing and not mandatory testing, and heavy emphasis on prevention actually can work. And we have very good scientific data to back that up.

Dr. Schmid indicated the enormity of the epidemic. In San Francisco, it is the third leading cause of death. Amongst young men between 20 and 40, it is far and away the leading cause of death. And it is high in the ranks already of cancers generally, all cancers, and heart disease and stroke. It is a major problem, and I think that the enormity has only slowly been sinking in at a national level. Last year, the Federal Government held a conference, a CORE conference, organized by the CDC to project the epidemic to 1991. It was then 5 years since the first cases had been reported in Los Angeles and then in San Francisco.

So in 1986, 5 years after the epidemic had begun insofar as we knew in the United States, there were projections ahead to 1991. And 1991 figures I think should be cited. By 1991, the Federal Government showed that there would be a quarter million cases cumulatively. In 1991 alone, which after all is not far away, there would be 75,000 new cases nationally, and 50,000 deaths.

These figures have been mentioned many times. But remarkedly they go in and out of focus. They sink in and then they disappear, and it is hard for political representatives as well as the public to recognize that those are extraordinary figures and will require an extraordinary response, an all-out response that is very highly coordinated and very well funded.

Also it has to be said that this is a new illness and it is additive to everything else that we have had in the health care field. That implies that it is going to require added resources just of itself.

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Whatever we were doing in heart disease and stroke, cancer and other areas of health care, we now have a brand new illness mainly affecting relatively young people, which is very costly, very labor intensive in terms of care, and expensive in terms of its health education prevention work, and it is additive to whatever we have done before.

So there is no time to delude ourselves into thinking that we can shift money from one pot to another pot. This is going to require substantial added resources, because it is a brand new added burden on our whole health care system.

I am of the view, as health directors are perennially optimists by nature, that one day after all of the travail is over and we look back, we will have had a quantum jump scientifically in our understanding, of the relationship between viruses, the immune system, and cancer which will benefit the world at large.

Hopefully, we will have come to grips with the whole question of drug abuse, which I think is really one of the two or three factors that are now most sapping the strength of our society. And I think that we will have learned lessons about how health care is organized, its reimbursement mechanisms, and how we allocate our resources in health care.

Up to now, we have insufficiently rewarded or reimbursed ambulatory care, in the doctor's office, education, preventive health services, and care in the home. The AIDS epidemic is making us recognize that if we give all of the care in the community hospital, or the VA hospital, or in the acute care hospital that the expenses would just be unbearable, because that is the most expensive end of the health care spectrum.

Care in the hospital, no matter what kind of hospital it is, is something on the order of $700 or $800 a day. So to provide the care in the home, an ambulatory care clinic, or a day clinic where the individual comes, has treatments, and can go home at night, or to have skilled nursing care if the individual becomes so ill that long-term care and skilled nursing care is available would be good.

Dr. ROWLAND OF GEORGIA. Dr. Werdegar, we are operating under some time constraints.

Dr. WERDEGAR. I am sorry, I beg your pardon.

Dr. ROWLAND OF GEORGIA. If we could ask you to summarize the excellent statement that you are giving us, because we do have some questions that we want to ask you, too.

Dr. WERDEGAR. Well, the way that I organize in my own mind approaches to the AIDS epidemic is to look at its surveillance, and tracking the epidemic so that you can plan and project for the future. Second is the educational mission. And in my concluding comments, I want to say something about that and the VA. Third is organizing a care system that includes all of the elements that I was just describing. And fourth is research about which you have already had discussion.

The VA will need the resources to do the care. It is the largest health care system with many of its clients affected. And providing 10 percent of the care in our region, they will need the resources to do the job. And if they do not, I feel in wearing my hat as the Health Director that we in the city and county health departments will have to provide the care instead.

The VA will need the funds, I think, to reach out, and to reach out regionally. This is a major center which serves all of northern California. Its clients do not all live in San Francisco. Much of the work in AIDS field is education. We say it again: The three most important things are education, education, and education for purposes of prevention. And the VA has a very large client population scattered regionally through northern California which it must reach out to educationally and will need the funds to do so.

It must provide its care outside of the institution itself as well as in the institution. It has to provide counseling and support to the homeless. Veterans constitute one-third of our homeless population in San Francisco. It needs out-reach clinics in downtown San Francisco, in downtown Oakland, outside the VA hospital to reach out to substance abusers. These are individuals who have psycho-social problems, they and their families, that pull them out of the health care system and into dangerous behaviors, drug use, or to a lack of health care services altogether.

If I were to give a message about what I would like to see the VA do—it does superlatively well, I think, in care in its hospitals and in its clinics—it has to reach out to its very large client population substantially at risk, particularly if they are substance abusers, and to do so throughout the region and outside the main complex which you are visiting now.

I would just conclude by saying that Dr. Ziegler of the VA staff here and others do meet with me and the others in the community who are concerned with ongoing planning for our city in AIDS care. And I trust that a national model will emerge. Your commission that you described, I think, could be extremely helpful in removing some of the political aspects of AIDS and the arguments over this kind of testing or that by having a body of individuals recommending and presenting options on a regular basis to the Congress and to the people, and assuring that we are constantly tracking, monitoring, and doing all we can with respect to the epidemic. I am sorry if I talked too long.

Dr. ROWLAND OF GEORGIA. Thank you. Well, there is a lot to talk about. It is awfully easy to just talk right on about the many problems that we have got. It was an excellent statement, and I hope that you will submit some additional information to us for the record. And I appreciate the very kind remarks that you made about us when you initially started your statement and for your support of this commission.

I would like to know recognize our good friend and colleague, Ms. Pelosi, for any questions that she may have.

Ms. PELOSI. Actually, Mr. Chairman, Dr. Werdegar anticipated some of my questions in his remarks. I was interested in his outlining the AIDS effort in San Francisco and his experience in working with the VA, and particularly whatever joint projects on AIDS you might want to see happen.

Dr. WERDEGAR. We would like to see projects at all levels of research, basic and fundamental, looking at how the virus invades the body and does its damage. Drug trials would be an extremely important area of research, clinical trials of new drugs. They are expensive to do, but there are thousands of individuals who will

enter into such drug trials here, and the VA will unquestionably be an important focus for such clinical trials.

To give an example, in addition the drug AZT is now used to help prolong the lives of AIDS patients, we are beginning trials to see, if you give such drugs such as AZT early after you have discovered somebody is antibody positive, or soon after you have discovered infection and there have been some changes in the blood test, you would prevent AIDS from occurring altogether.

So those kinds of clinical trials may involve hundreds of individuals and are expensive to conduct and must be done cooperatively. And then we have surveillance work to do to track the epidemic to see if we are gaining on it or losing as the months ensue.

Ms. PELOSI. I have been telling my colleagues that the work that you and your colleagues are doing in San Francisco can serve as a model for the country. I hope that you will keep us informed not only of what you were reporting on today but what your future planning is to cope with the problem in the future as well as the present situation.

Dr. WERDEGAR. Thank you, Congresswoman Pelosi.

Ms. PELOSI. Thank you, Dr. Werdegar. Thank you, Mr. Chairman.

Dr. ROWLAND OF GEORGIA. Thank you, Ms. Pelosi. Mr. Gray.

Mr. GRAY. Well, thank you, Mr. Chairman. I will be brief. I, too, want to join my colleagues in thanking you for your time, and your expertise, and the good work that you are doing here.

You mentioned, Doctor, that you are having about 143 cases, I believe you said 143 monthly?

Dr. WERDEGAR. That is correct.

Mr. GRAY. How are you finding those, is it through voluntary testing, or is it symptomatic when they come in? I assume that is about average, is it, 143 a month?

Dr. WERDEGAR. These are new cases of full-blown AIDS, of sick individuals.

Mr. GRAY. Are these people you would have known about earlier through voluntary testing, if you were able to look at their number? I understand that they are anonymous, but if you were able to look at the number, would you have, you might say, "expected" these people to come in? Did you know about them, or are these new cases that are popping up that you did not know about?

Dr. WERDEGAR. No, their physicians knew about them. They were under care. We, at the health department, might not have known. What we do each month is gather data from each hospital in the community. That is where the cases are most often identified. We ask physicians to report. So we have a system in which we find out all new cases of AIDS each month. This is done in other communities, although somewhat still less aggressively. But we know how many new cases were found here at the Veterans' Administration Hospital and at San Francisco General Hospital.

Mr. GRAY. Doctor, let me phrase the question a little bit differently.

How many are you discovering through the voluntary testing? We are concerned that if we set up clinics all over the country to do voluntary testing—I personally am opposed to mandatory testing—but on voluntary testing, would you have uncovered any part

of this 143 and been able to track them? And, as you mentioned a moment ago, if A.R.Z. is helping, if they find out later that if you catch a case early and start giving them A.R.Z., that you possibly could prevent either A.R.C. or the full-blown AIDS from happening? I think that is an area that you ought to be looking at more intensely.

Dr. WERDEGAR. Yes. Let me give you a quick impression of that. Of course, it will depend on the community and the prevalence of the infection in the community. We have anonymous test centers that we have been operating where people go with a computer number and have their blood tested. Not to see if they have AIDS, but to see if they have been infected, and the evidence for which will be that the antibody test will come back positive.

And in our test centers, the rates of positivity, the numbers of those positive have been fairly regularly around 20 percent for the last number of months.

Mr. GRAY. That come back positive?

Dr. WERDEGAR. It is 20-percent positive, meaning that they have the infection, and 80 percent do not. Now remember, this is self-selected, people who, for one reason or another, think that they may have been infected and are curious about whether they have been infected. And for that reason, they go to the test center to find out what their antibody status is.

When we give the report we always do it face to face and combined with a fair amount of education. That is what makes the test expensive. And when people talk about testing in very large numbers, they must realize, I am talking about political representatives, that it is expensive if you are going to do it properly. When you give the result, either positive or negative, you have to have a long discussion with the client about what that means and how they might conduct themselves in the future for their own health and for the health of others.

Mr. GRAY. That counseling does trigger preventive medicine at that point, does it not?

Dr. WERDEGAR. Well, that counseling, I think, is part of preventive medicine. I think that the antibody testing, when done on a voluntary basis and a confidential basis, is really an important ingredient for preventive health care.

Mr. GRAY. Thank you, Mr. Chairman. I have several other questions, but time is of the essence.

Dr. ROWLAND OF GEORGIA. Well, we have some additional questions that we might want to submit for the record, too, and we would be very grateful if you would answer those. I have no questions to ask you at this time; but just again let me express my very grateful appreciation for you being here this morning.

Dr. WERDEGAR. Thank you very much.

Ms. PELOSI. Mr. Chairman, we are, as you know, very proud of the effort in San Francisco under the leadership of our Mayor and Dr. Werdegar. I think that his testimony is distinguished by its concern for the patients. That has been a characteristic of the care and the effort in San Francisco with great sensitivity towards the patients. We want that to be part of the message when it goes back to Washington, D.C. as well. I thank Dr. Werdegar for all that he has done to make that possible. Thank you.

Dr. ROWLAND OF GEORGIA. Thank you, Congresswoman.

Dr. WERDEGAR. Thank you.

Dr. ROWLAND OF GEORGIA. Our next panel is Dr. John W. Ditzler who is the director of the Veterans' Administration Medical Center here in San Francisco. He is accompanied by Dr. Albert Jones who is Associate Chief of Staff for Research and Development, and Dr. Corbin Cherry, who is the chaplain.

Dr. Ditzler, thank you very much for all of the hospitality and cordiality that you have extended to us during these past three days. You have worked so hard to make this trip fruitful for us and it has been. And we welcome your colleagues here, too, and ask you to proceed in any manner that you so desire.

STATEMENT OF DR. JOHN W. DITZLER, DIRECTOR, VETERANS' ADMINISTRATION MEDICAL CENTER, SAN FRANCISCO; ACCOMPANIED BY DR. ALBERT JONES, ASSOCIATE CHIEF OF STAFF FOR RESEARCH AND DEVELOPMENT, SAN FRANCISCO VAMC AND PROFESSOR OF MEDICINE AND ANATOMY, UCSF; AND DR. CORBIN CHERRY, CHAPLAIN, SAN FRANCISCO VAMC

Dr. DITZLER. Thank you, Mr. Chairman. I would like to introduce to my right and to your left Dr. Al Jones, our Associate Chief of Staff for Research; and to my left or your right Dr. Corbin Cherry, a distinguished Vietnam veteran, our spiritual counselor, and our advisor on all things relating to the problems of the patient with AIDS.

In the interest of time, Mr. Chairman, I would ask that my written statement be entered in full for the record, and I will proceed with oral testimony.

Dr. ROWLAND OF GEORGIA. Without objection.

Dr. DITZLER. Thank you, Mr. Chairman. We have been asked to address and assess the impact on this medical center of the disease complex known as AIDS. We wish to summarize at this time our very deep concern that future discussions enveloping the topic of AIDS also consider equally and forcibly those individuals who develop positive antibody responses to the virus, and who probably go on to develop various illnesses and symptoms at a variable period of time that may extend five, seven, and even many more years in time because there is an occurrence of symptom complexes.

In our view, this seemingly simple chronology must be understood in order to come to a full knowledge about the management and the cost of care and treatment associated with this phenomenon we now call AIDS.

Although some patients classically have a defined illness of an opportunistic nature at the time, and some are called A.R.C. and some are called AIDS, we again would say that we must have equal concern for the HIV positive individual even though he has no other findings at the moment.

The medical costs for repetitive differential diagnostic attempts to serve that HIV positive individual is an area that can easily be brushed aside if one only dwells on the topic of AIDS.

Mr. Chairman, I need also point out that San Francisco City and County are a unique area of the country in that I believe that the local population has developed a sense of empathy and tolerance to

such a degree that the options for hospice and other out-patient therapies are at an optimum as compared with many other communities of which I am aware.

Operationally, our struggle to deal with these patients is to come to an understanding that it is an epidemic, and that the standard and usual reimbursement schemes, either DRGs or any other mechanism, are not applicable to epidemics. And moreover, the resource allocation methodologies currently used within the VA do not provide for appropriate care of these epidemics.

Although the cost of treating the disease has been variously estimated at $20,000 per year per patient, we believe, although we have no firm grip on the actual amount, that the more probable amount is $35,000 per patient per year.

The ability to prevent accidental transmission to health care personnel now probably will require even many more costs, in terms of protective gear, despite the low incidence of infection. And I would call to your attention the last issue of the AMA newsletter in which one of your Congressal folk also points out that it will be literally criminal not to provide all of these new regulations. And to this morning's newspaper, a United Press comment on the hospitals' new guidelines from the CDC which imply that we are now going to have to treat every patient as a mandatory AIDS patient.

Mr. ROWLAND OF GEORGIA. Without objection, we will make those part of the record.

Dr. DITZLER. Thank you, sir.

[Retained in committee files.]

Dr. DITZLER. I would indicate to you that in this hospital, as far as we know, we have had no transmission to any hospital personnel. We have not instituted all of the elaborate precautions that some are suggesting. We do not believe in mandatory testing. But we do, however, treat every patient, in effect, as if they might have been a hepatitis carrier.With such preventive measures, we have not had transmission to our employees .

We have had 15 deaths among our employees, not from transmission, but because they were members of a community that received transmission elsewhere. I think that it is important to emphasize that point.

We believe that this medical center is on the forefront of the development of medicine in general, not only in the case of AIDS. And I would point to the fact that Dr. Ziegler, whose name has been mentioned many times as our Associate Chief of Staff for Education, is also the head of the University AIDS Center.

And appended to the full statement that has been entered into the record, I would point out that we have a list of distinguished researchers already on board and the list of their projects that they are already funded for from other sources that relate very much to the AIDS center proposal that Dr. Schmid has suggested that we are well prepared to handle.

Dr. Jones will be prepared to answer any questions relative to specifics of the AIDS research that we are undergoing.

Finally, Mr. Chairman, I would like to summarily address several related topics that have a major operational impact. The first of these is the social, psychological, and spiritual impact and the ethi-

cal impact of AIDS, not only on the patient where the prognosis is at best not good, but upon the impact on the health care providers.

Dr. Corbin Cherry, our chief spiritual counselor and ethical counselor, will be happy to address any questions.

Additionally, I would like to refer to some of the concerns relative to the transmission of the virus within the hospital. This is a concern, and we will be increasing our activities. One area within the VA at least I would call your attention to is the dental clinics. I think that we must consider the need in most VA dental clinics for the new high-speed drills, and the aerosolization of saliva and blood at the site of the tooth.

And I believe that we therefore are going to have to put in separate air-conditioning type units, and we are going to have to have walls that are more easily cleaned. I think that we will have to have our dentists dressed in appropriate garb with frequent changes of gloves. I do see a hidden cost there that we have never before discussed.

I would like to say finally, Mr. Chairman, that, in the age group of the patient with AIDS, death seems almost more inevitable than dodging bullets on a battlefield. That point is one of the devastating aspects of the disease.

And finally, Mr. Chairman, we have survived here at the VA in San Francisco, I think reasonably well, although we are not near the level of financial support that we desire or believe we need. And it has been primarily because of the diligence and the concern for patients on the part of a well-educated and well-trained group of individuals.

And I must confess that it has also been a struggle for us to get the attention of those in Washington that we feel should understand this, but I am happy to note that our persistence apparently is paying off.

I will be happy to answer any questions that you or your colleagues may have. Thank you.

Mr. ROWLAND OF GEORGIA. Thank you very much, Dr. Ditzler, for that very fine testimony.

Gentlemen, I believe that you have a statement that you would like to make. And let me say to you that I appreciate the conversations that you and I have had over the past couple of days. You certainly have provided me with a lot of valuable information. You may proceed.

STATEMENT OF DR. ALBERT JONES

Dr. JONES. Thank you very much, Mr. Chairman. I would like to make just a few remarks regarding the San Francisco VA research program. We are very proud of this program; it now employs 400 individuals. The budget for this past year was $20-plus million which will rival 80percent of all of the medical schools across the United States. It is made up of 105 dedicated investigators, many of whom are world leaders in such areas as immunology, oncology, endocrinology, gastroenterology, and cell biology.

I would also like to refer you to Appendix C of Dr. Ditzler's testimony in which we did make a list of all of those individuals and their level of funding who are engaged in AIDS-related research.

I would mention, however, that the area which we are heavily involved in at the present time, the number one that Dr. Schmid mentioned already is mucosal immunity. Now we ask ourselves, if we take in so many viruses, bacteria, and other harmful agents each day, why are we not affected continuously. The reason for that is because, in the juices of the saliva, the tears, the genital-urinary tract, and the respiratory tract, is a protein called immunogulant-A. This protein, this immunogulant, provides a protective mechanism for the removal of the harmful agent.

Our center here is one of the leaders in the country in mucosal immunity and in the study of IGA metabolism and function. In fact, a book is now in press on the subject that has been worked on for the past 2 years by Dr. Heyworth and me, and it will be out shortly.

We also have expertise in T-lymphocyte function. Of course, the CD-4 lymphocyte is the one that infects the upper T cells infected with the AIDS virus. And we also studied the CD-8 lymphocyte, which is a suppressor of lymphocyte, which may turn out to have a remarkable effect on decreasing the replication of the AIDS virus.

We are studying macro phases of HIV infections, gene expression in tumor cells, opportunistic infections, drug trials. And we have already heard about the substantial effort that John Ditzler here has put into the research center.

Now, finally, we were asked what would our needs be in the future. Dr. Schmid, about 13 years ago, recognized that there were a number of individuals here in the Bay Area who were engaged in various aspects of hepatology, that is the study of liver structure and function and pathogenesis of liver disease.

He put together a program which brought us together, and that was a center, a liver center. And now I am happy to say in the summer of 1987 that we represent the world's single leader in the study of liver disease, liver physiology, and liver molecular biology.

That came about because of funding from the NIH for this center. The center brought us together. It made the research more efficient. It provided monies to bring in visiting faculty, and it supported pilot feasibility projects. In other words, that individual who has, or had, a creative project could bring that project to us. And internally, we would evaluate the project and get that project moving without delay of a peer system through NIH. It would be peer review by ourselves and by some external advisors.

As part of Appendix C, we have a letter of intent to set up such a center here and would hope that future monies would be directed towards helping us move in this area for this center.

Now I would like to have permission to submit a full statement for the record.

Mr. ROWLAND OF GEORGIA. Without objection.

[The prepared statement of Dr. Jones appears on p. 60.]

Mr. ROWLAND OF GEORGIA. Thank you very much, Dr. Jones. Dr. Cherry.

STATEMENT OF DR. CORBIN CHERRY

Mr. CHERRY. Yes. Mr. Chairman, I would like to say for the record that having spent 4 years in Washington that there is a dif-

ference between heaven and Washington. I would also like to say to Congressman Gray that we are all here to learn. The facts and figures which you have been furnished only deal with hard facts and hard data which we have collected about people who are infected by this disease. There is a large group of people who are affected by the disease.

The total impact of AIDS both in infection and affection is paramount to us here. The disease is basically filled with nothing but negatives. There are not any positives at this point. AIDS patients are under a lot of stress. They are dying young, and death is coming quickly. They are lonely and they are fearful. Basically, death is stress related, and that is what is going on with these AIDS patients.

There is a real need for us here as care givers to enter into these situations with the spirit of God's love within us. And I am not here to preach to you, but I am here to talk to you as one human being needing to deal with another human being.

We might be totally opposed to the lifestyle of most AIDS patients, but they are in need of caring and someone to care about them because they are dying. When we deal with AIDS patients, we have to remember that most of the people that we deal with will not be around if and when a cure comes about. That makes what we do that much more intense.

The questions that we have to ask here are what can we do to make the patient's life better in the time that he has left to live? What can we do to bring about healing to this infected person's life on a mental, spiritual, and physical level before he dies? And, how do we feel about AIDS and someone who is dying of this disease?

For the most part, many of us are very angry about the disease and how it got into our environment. We are angry about how it spread through our world and through our country and through our city. But anger will not defeat AIDS. Research will.

We have to search for answers in our medical centers in order to defeat the problem. Please remember that AIDS affects many on its trek through our society. There are kinds of needs that need to be handled, needs that come from people like physicians, and nurses, and chaplains, and social workers, and others whose job it is to make the best of a horrible situation. Congressman Gray, we are here to learn, too.

Mr. GRAY. Thank you.

Mr. ROWLAND OF GEORGIA. Thank you very much for a very excellent statement. We had a forum in Macon, Georgia just before I came here. On that panel was a minister of one of the churches there, a Methodist church, who referred to the scriptures, and particularly the scripture that relates to the lepers and Jesus. It was a very great statement that she made. And I just want you to know that the people in Georgia are very much aware of where you are coming from.

Mr. CHERRY. Thank you, sir.

Mr. ROWLAND OF GEORGIA. I want to thank all of you very much for the excellent statements that you have made. And now I will yield to our Congresslady from this area, Ms. Pelosi.

Ms. PELOSI. I want to thank Doctors Cherry, Ditzler, and Jones also for their comprehensive testimony today including all of the

personal aspects of the devastation of AIDS. Thank you, Dr. Cherry.

Dr. Ditzler, thank you so much for the education over the past few days. I learned a lot about the VA. And as I said earlier, it gives me reason to be hopeful about the AIDS situation.

I had a specific question for Dr. Jones. I am very enthusiastic about your center as a possible place where funds could be put and research could be developed for the cure.

Could I assure my colleagues in Washington, D.C. that such a center would protect the confidentiality of those who might participate just in the routine conduct of business, that that would not be jeopardized?

Dr. JONES. That would not be jeopardized.

Ms. PELOSI. Thank you, gentlemen. Thank you, Mr. Chairman.

Mr. ROWLAND OF GEORGIA. Mr. Gray.

Mr. GRAY. Thank you, Mr. Chairman. Since we do have two additional witnesses before noon, I will keep my questions short.

As you stated in your very excellent testimony, Dr. Ditzler, funds are a problem, and we understand very succinctly the problems of appropriating money and then the Office of Management and Budget deciding. We have over 250 VA medical centers in the United States. So naturally, they have a tremendous problem in trying to find out where to send the money.

Would you have any information as to exactly how much additional funds you think that you would need in the next fiscal year for this joint research effort between the university and your VA center here in the San Francisco area?

Dr. DITZLER. Let me distinguish operational dollars from research dollars. Research dollars can almost be endless in many ways. I think that the research center itself is needing not so much a dollar figure at any one time as sustenance over a prolonged planned period, which was indicated by all. And I would submit that for the record, the exact amount.

Operationally, on the basis of the current number of cases, we project there to be a $5 million deficit in next year's budget alone in this medical center just for the subject of AIDS. We have projected that we have probably a $5 million deficit this year in fiscal 1987 for which we have received almost a half a million dollars, which means that we are really taking from one pocket and putting it into another.

Mr. GRAY. You are playing Laurel and Hardy.

Dr. DITZLER. Yes. Thank you.

Mr. GRAY. Mr. Chairman, I just want to make that point. Because as we said earlier in the press conference, we are here to listen, and to also carry back to our other colleagues who could not be with us, what the needs are out here, and to reassure the population that in this area that we and the Congress are sensitive to their needs and want to make sure that we get every single dollar that can be used feasibly. Thank you.

Mr. ROWLAND OF GEORGIA. Absolutely, and not be shifting money around taking away from one place and putting into another. We are going to do what we can to assure that.

Dr. Jones, I am really excited about the avenue that you have taken. I guess that when we learn about protein electrophoresis, it

really opened up some doors in all kinds of areas. And now when you talk about IGA and the possibilities there for really doing something about the spread of this, that is really exciting, and I am pleased about what you are doing there.

I want to thank all of you very much for being here this morning. There are a lot more questions that I would like to ask. We will submit them for the record, as time constraints prevent us from doing it here. Thank you.

Our next witness is Dr. Herbert Perkins. I am going to ask Mr. Gray if he will Chair this for just a short period of time.

Mr. GRAY. Dr. Perkins, we are delighted to have you before the committee this morning. You may proceed in your own fashion.

STATEMENT OF DR. HERBERT PERKINS, DIRECTOR, IRWIN MEMORIAL BLOOD BANK, SAN FRANCISCO

Dr. PERKINS. Thank you for the opportunity to provide testimony here. I have submitted a written statement. I would like to suggest that we put it into the record.

Mr. GRAY. Without objection, the entire statement will be printed in the record.

Dr. PERKINS. I am the director of the Irwin Memorial Blood Bank which is a free-standing nonprofit corporation that provides all of the blood used at this hospital and in fact all of the hospitals in eight counties in northern California, as well as providing specialized consultative and testing services for these hospitals.

I would like to address particularly two areas. We have had a tremendous amount of experience in using the test for antibodies to the AIDS virus, and the test has been surprisingly and remarkedly sensitive and effective in preventing the transmission of the disease at this point through blood transfusion.

What I would like to speak about briefly is the impact of the false positives that occur with this test. We exclude people from the AIDS risk groups and they are not donating, and also people who have been positive for anti-HIV in the past have been eliminated. So we are dealing with a low-risk group. In this kind of a situation, when one does a test for the antibodies to the AIDS virus, for every true positive that you turn up, you turn up about two to three false positives.

And the false positives give us a great deal of trouble. Because what we do as the next step is to move on to a confirmatory test or Western blot test which is supposed to distinguish the true from the false positives. And unfortunately, in about 10 percent of the cases, the Western blot comes back with an equivocal answer.

Mr. GRAY. Excuse me, Doctor, for interrupting at that point.

You are saying that the Western blot is not accurate 100 percent?

Dr. PERKINS. I am saying that 90 percent of the time it gives us a good yes or no answer, and 10 percent of the time it leaves us scratching our heads. And that gives us a very unpleasant task. It is bad enough and it is very difficult giving bad news to an individual—that they are infected with the AIDS virus—but it almost worse calling them in and telling them that we are not sure whether they are or not. And that we are going to have to do more tests

and we are going to have to follow them for months, and we still may not be sure.

So because of this experience, this is one of the things that makes me personally convinced that mandatory testing is a very bad thing to do. It is going to get an awful lot of people into trouble.

Because of our concerns about confidentiality, as Congresswoman Pelosi points out, and despite the advice that we give to people who have positive tests to be careful to whom they give that information, we know of cases where families have broken apart, and where children have not been let into school, and where people have lost jobs just because they learned through us that they had a positive test for antibody.

The other aspect of my report that I would like to discuss is one of the ways in which we interact with the Veterans' Hospital in the area of AIDS and with our other hospitals. Situated as we are in the city with the highest per capita incidence of AIDS of any city in the country, it is obvious and it was inevitable that we ended up infecting many recipients through blood transfusions before we even realized that AIDS was an infectious disease and could be transmitted by blood. And it is this long incubation period that begins to come home to roost as the years go by.

We have pretty well stopped transmission in this way, but we would estimate something like 2,000 individuals were infected with blood provided by the blood bank. We have made all out efforts to try and identify these people and recommend that they be tested, but we can only do that when we have something to go on.

So we start with individuals who have developed AIDS or people who come in to be blood donors and are found positive, and then we ask the question, "Have you donated any blood here before today," and we look at our files. And then we go back and advise the previous recipients of these infected donors through their physicians that they may possibly have been infected.

And we have learned going back over the years that in people transfused since 1977 by an individual who is now known to be positive, and we do not know when he became infected, that a little more than half of those individuals actually were infected themselves and are antibody positive. And as we are following them along through the years, we are seeing the same appearance of actual disease that has been referred to in the other populations.

So it has been a very difficult problem, and one that we think we are getting a handle on now. We are trying to encourage everyone who got transfused (certainly those who received multiple units of blood) in this area during the period of risk (which is 1977 through March of 1985), to get themselves tested. But again, I would emphasize voluntary testing, and not mandatory. Thank you.

[The prepared statement of Dr. Perkins appears on p. 65.]

Mr. ROWLAND OF GEORGIA. Thank you very much for that very good statement, Doctor Perkins. I have a question that I want to ask relative to use of AZT. We are going to be using that more and more apparently, and its impairment of erythrogenesis and possible development of aplastic anemia.

Can you give me an idea what impact you think that might have on the blood supply?

Dr. PERKINS. We expected, Dr. Rowland, that it would have a very profound impact. Dr. Werdegar called me in more than 6 months ago to discuss it. Our best estimate was that we perhaps would need about 10 percent more blood than we had been collecting—and collecting with considerable difficulty— I might add.

However, at this point, I am told that approximately 500 individuals are taking AZT here in this city, and we do not see a measurable impact. And I am told the reason that we are not seeing a measurable impact is that the physicians treating patients at the present time are not giving as big doses as occurred in the restricted rigid protocol in the experimental situation. When the patient gets too anemic, they back off on the dose a little bit.

Now the question still to be answered is whether the treatment is going to be as effective if they back off on the dose. But at the moment, blood has not been a problem. We have not had the increased demand that we expected. If it turns out that the lower doses are not as effective as the full doses given during the original trials, then we are going to be back where we were before.

Mr. ROWLAND OF GEORGIA. So there are many aspects of this disease that we do not know about, and only time will tell, and that is just another one of the things that will have to be considered. I have several other questions, but I will submit them for the record because of time constraints, and we would appreciate your giving some answers to them later. Let me yield at this time to the gentlelady from this area, Ms. Pelosi.

Ms. PELOSI. Thank you, Mr. Chairman.

And thank you, Dr. Perkins. I appreciate your comments on the mandatory testing and how ineffective it would be.

Could you tell me just in relationship to the VA hospitals what you would like to see. Some of the other witnesses have told us some additional projects that they would like to do with the VA hospital here.

Do you have any projects that you see on the horizon?

Dr. PERKINS. Yes. The area that interests us, of course, is the follow-up on the individuals who we may have infected through blood transfusions over the past 8 years. And here we are getting cooperation. When we do get information that somebody could have been infected with anything by a blood transfusion, we think that patient has a right to know. The physician responsible for that patient makes the decision whether it is wise to tell the patient.

We pass the information along, and we want to know what is happening with these people. The group infected by blood transfusion is an unusually useful group to follow if you are trying to see the natural history of AIDS, because you know when they got exposed. It is the only group in which you can say this is the date on which the infection was transmitted. So all of the guesses about what the true incubation period of the disease is really have to come from this group. Because in the other categories, you do not know when they got infected.

Ms. PELOSI. Thank you, Dr. Perkins. Thank you, Mr. Chairman.

Mr. ROWLAND OF GEORGIA. Mr. Gray.

Mr. GRAY. Thank you, Mr. Chairman.

I want to join my colleagues, Dr. Perkins, in thanking you for coming this morning.

Dr. Perkins, when a donor comes in and donates blood, do you do just an antibody test or do you do any other serology on that particular blood? Because as we know, you might be infected say one month, and two months later come in and donate and show negative.

How long do you hold that blood before you let somebody use it, or do you test it again, or do you do any other serology on the blood, or is it just a plain antibody test?

Dr. PERKINS. Let me say that we test for multiple diseases.

Mr. GRAY. More than just for AIDS then.

Dr. PERKINS. Right. We do a test for the presence of hepatitis-B virus, a test for an antibody to the hepatitis-B virus, and a liver function test. And these are attempts to prevent transmission of hepatitis. And the antibody to HIV, the agent of AIDS.

Mr. GRAY. Do you look at T-cells and the white cells and all of that?

Dr. PERKINS. This is not a test that can be done on a blood donor on the mass scale that we have to deal with in providing blood. Nor can we keep the blood for 6 months and repeat the test, let's say, to make absolutely sure that it is okay.

Now in the 250,000 tests that we have done since we had availability of the material, we have had two instances in which a donor who had tested negative on one occasion tested positive on a subsequent occasion. So that is the kind of situation you are talking about.

Mr. GRAY. That was going to be my next question.

Do you consider a negative reading to be negative, or is there some possibility that the antibody has not manifested itself by the time that you do the test?

Dr. PERKINS. Well, dealing with the population that we are now dealing with, a negative almost always means that this is not an infected individual. A false negative is very rare. These 2 out of 250,000—I do not know if these people were infected at the time of their prior donation. We checked on what happened to their recipients, and unfortunately they had died of their primary illness. So we have no information on that.

Mr. GRAY. There is a slight risk but it is slight?

Dr. PERKINS. Yes. You know, the Institute of Medicine has guessed the risk as something like one in a 100,000. In San Francisco, it might be one in 50,000, we figure.

Mr. GRAY. And Dr. Rowland asked you the question that I was going to ask you as to those taking AZT.

Did you say that ten percent you thought was going to be the increase in the demand for blood because of the transfusions required as a side effect of AZT?

Dr. PERKINS. That is what we had anticipated, but we have yet to see it.

Mr. GRAY. Thank you.

Mr. ROWLAND OF GEORGIA. Thank you. I have one additional question that I had failed to ask. Our only way at this point of knowing whether or not a person is infected is to test antibodies, that is the only way we have, or T-cells, the decrease in the number of T-cells. But those are indirect means.

And I do not think that anybody has asked this question yet, but is there anything on the horizon insofar as culturing of peripheral blood where we may identify the varieties as we do with bacteria and rule them out, is there anything going on in that area that you know of?

Dr. PERKINS. Yes, we are doing a lot of work of that type, but it is very time consuming and expensive work and nothing that we could do on 500 donors a day. We do use the T-cell suppressor ratios, but merely as a way of following what has happened to the infected individual.

We have at this point three different assays for the antigen, the viral antigen itself, that we are evaluating, so that one can look for the virus that way. But this test is positive in very, very few people who do not have the antibody.

We can culture the virus. And if we try to culture the virus from healthy donors who are antibody positive, we can grow the virus in a single attempt in over 80 percent of them. So these healthy people are clearly carrying the virus in a way that you can make it grow very easily.

We are looking at second generation antibody tests using genetically engineered viral antigens as targets, so that they will be more specific, hoping to avoid the false positive problems that I have been talking about. So there are a lot of things being looked at and advances made. I think that we will be much better off in another year.

Mr. ROWLAND OF GEORGIA. Doctor, thank you very much for being here this morning.

Dr. PERKINS. Thank you, sir.

Mr. ROWLAND OF GEORGIA. Our next and final witness is Ms. Michele Carstens who is a social worker for the AIDS Foundation. Ms. Carstens, thank you for being here this morning. We know that there must be a lot of things happening in your area that you have not been confronted with in the past. So we are very pleased you are here, and ask you to proceed as you so desire.

STATEMENT OF MICHELE CARSTENS, SOCIAL WORKER, SAN FRANCISCO AIDS FOUNDATION

Ms. CARSTENS. Thank you. I have submitted a written statement.

Mr. ROWLAND OF GEORGIA. It will be made part of the record without objection.

Ms. CARSTENS. Thank you. One thing that I would like to address that has not particularly been mentioned is that we have a clear understanding of the number of AIDS patients, but no one has really addressed the issue of how many people are suffering from AIDS related conditions. And I would just like you to understand that these people are also ill, and also a great number of them unable to work, have lost their insurance benefits, and these people in addition are putting a burden on the medical system. And because we do not have a clear idea of their numbers, I think that they are not being addressed perhaps as they could. So I would just like to add that.

[The prepared statement of Ms. Carstens appears on p. 67.]

Mr. ROWLAND OF GEORGIA. Is there any further statement that you want to make, or are you going to let us ask questions?

Ms. CARSTENS. No, you can just ask questions. Thank you.

Mr. ROWLAND OF GEORGIA. All right. Ms. Pelosi.

Ms. PELOSI. First of all, Mr. Chairman, you should know that the San Francisco AIDS Foundation has been, I do not know what the word is, beyond a model for the rest of the country in its education efforts as far as prevention is concerned for AIDS. On your next visit, I hope that we will have time to visit the San Francisco AIDS Foundation. Its efforts are effective and it is cost effective as well in terms of the job that it does. We are all very proud of the work they do.

I think that in putting together your commission that they could be the source of some information that would help the commission in terms of education in dealing directly with some of the AID patients.

Ms. Carstens, could you tell the committee what you think we should carry back to Washington? I have your statement, but in terms of education, what makes you special from the rest of our witnesses today?

Ms. CARSTENS. Well, in terms of education, I think that there is agreement that education is the best method of prevention. But I would like to say that my work is more directly with people who have already been infected. And so you could better direct that I think to someone in the education department at possibly a different time.

Ms. PELOSI. Thank you. Would you like to tell us any insights from working directly with the patients that would be useful?

Ms. CARSTENS. There are not enough people to do the work that needs to be done. And I am not sure that people understand that as much as they need to be. To my knowledge, there has been a limited amount of federal funds allocated to do direct patient care. At the AIDS Foundation, fifty percent of our funding comes from individual donors and fifty percent comes from funds from the city and the state. Of that, eighty percent of that money comes from San Francisco and twenty percent comes from the state. So I think that we could all use federal funds to expand our ability to take care of the patients.

Ms. PELOSI. Mr. Chairman, I just have one comment in addition to thanking Ms. Carstens for her testimony. She mentioned A.R.C. in her opening remarks. We were very pleased in Congress around the time of the hearings of Ted Weiss' Subcommittee of the Government Operations Committee when we were going to have the Social Security Administration come in and testify on why they had not accepted the CDC definition of AIDS for disability purposes, that the night before the hearing they announced that they had changed their mind on that subject.

I think that Congress was influential in that decision, and it will make a difference in the lives of some 4000 people in the country, at minimum, who are affected by A.R.C..

Thank you, Ms. Carstens. And thank you, Mr. Chairman.

Mr. ROWLAND OF GEORGIA. Thank you. I have one comment and question. And I am pleased that you have found an excellent relationship between the San Francisco VA Medical Center here in the

work that you do. And the committee thinks that the VA delivers fine care, and sometimes it gets prodded in the media, and maybe not as much credit goes as it should.

Could you describe maybe a couple of joint cooperative community-VA projects that you have been involved in. Dr. Ditzler said that such projects have allowed shortened in-patient episodes by making it possible for AIDS patients to live in the community or in a hospice.

Ms. CARSTENS. Yes, sir. We do not have any formal projects per se, but we do have a very close working relationship. And I get referrals from the nurses and other social workers here at this hospital about patients who have needs and try to work with them. In addition, I refer patients that I see who are ill here to the VA who might be eligible for care who might not be aware of that eligibility.

So when I get a referral, I try to arrange housing for people and give them assistance in addition to what they might be receiving here.

Ms. CARSTENS. Can you give us some idea about the way that people are affected by the loss of their job and insurance when a diagnosis is made and how you are dealing with that?

Ms. CARSTENS. Well, when people lose insurance, then they have to rely on—if they are veterans, of course, then they are eligible for care here—otherwise, Medi-Cal is what they would use to get to pay for their medical care. Sometimes they are not always eligible for Medi-Cal. And especially for people who have an AIDS related condition, there is a long process for them to become eligible for both their Social Security benefits and for Medi-Cal. And so they are without any kind of formal health care benefit and have to rely on most often San Francisco General Hospital to provide treatment.

Did that answer your question?

Mr. ROWLAND OF GEORGIA. Yes. Mr. Gray.

Mr. GRAY. Thank you, Mr. Chairman.

I want to join my colleagues, Ms. Carstens, in thanking you for coming this morning. You deal on a daily basis with these people who are suffering. And I think that you mentioned in your testimony that we put in the record that a short supply of AZT is a problem.

Could you tell us of any particular patients that you know of that would like to use that regimen of care that cannot get AZT?

Ms. CARSTENS. Yes, sir. There are many people who would like to get AZT that cannot afford it.

Mr. GRAY. They cannot afford it.

Ms. CARSTENS. They cannot afford it. The drug costs them roughly $1000 a month and sometimes a little less. If their health insurance does not pay for it, and most often it does not, then there is no way that they can get the drug.

Mr. GRAY. Now you are referring to non-veterans, of course.

Ms. CARSTENS. I am referring to non-veterans.

Mr. GRAY. If they are veterans, they could come to the Veterans' Administration.

Ms. CARSTENS. Yes.

Mr. GRAY. And I think that it was pointed out that you have 40,000 cases in this area and that there are 2000 veterans. So there are 38,000 out there who are not veterans, and therefore not eligible for any type of care from the Veterans' Administration.

And you are telling this committee that there are a large number with full-blown AIDS that cannot get any treatment at all, is that what you are saying?

Ms. CARSTENS. That is exactly right and that would like the treatment.

Mr. GRAY. Is not the county or the city able to come in and help with that?

Ms. CARSTENS. There have been a limited amount of funds specially set aside for A.R.C.. I heard that there were some federal funds that were allocated, but we have not heard anything about it.

Mr. GRAY. How large is your foundation, how far does it cover so we could get some numbers?

Ms. CARSTENS. We are available to give care to people in this City and County of San Francisco. And we probably have seen about 800 individuals just this year, but that is not a cumulative number.

Mr. GRAY. Are you cataloguing the names of those people who say they cannot get it? Because that is something that I am sure that your outstanding Congresswoman and certainly this committee would be interested in. Although the main purpose of this hearing is related to veterans and the care that veterans are getting, but we are also members of the United States Congress and we have to legislate nationally, and we certainly would be interested in those numbers to pass on to Mr. Waxman and others that are dealing with this.

Ms. CARSTENS. We could give you an estimate.

Mr. GRAY. I yield to the gentlelady.

Ms. PELOSI. Thank you, Congressman Gray. When I got to Congress, we found out that the State of California had not applied for its AZT money. They have now applied for it, and $5 million will come to California, with a percentage of that coming to San Francisco. So there will be some federal funds available for AZT. Again very sadly there is going to be competition for those dollars, because certainly it is not going to be enough. But there should be some monies coming in the next months ahead.

Mr. GRAY. Thank you.

Your foundation could catalogue at least the numbers if not the names. I think that this would be tremendously helpful to all to us in trying to see that some additional funds go into that program.

The people that you contact on a daily basis, do they feel like there is a heightened awareness of the fact that the Congress and everybody else is more active and more interested in this problem now, do they have any hope?

Ms. CARSTENS. I am not sure, sir. Because I think that when people are ill that their perceptions may be a little different. And actually the perception of the community is that the federal government has not done enough in terms of allocating funds.

Mr. GRAY. Well, as one Member of Congress, I would say that in the past I think that we have not done that. But I think that this

year where we appropriated almost one billion dollars just for this problem shows that we are doubling up to catch up as it were. And I hope that you through your foundation would impart that information, that we hope that we do see some light at the end of the tunnel as far as using all of the resources that we can get mustered by the Congress to help this situation.

And I know from Dr. Cherry's statement that these people are in despair. And I think that the more missionaries that we have out in the ranks telling these people that we are here not just to hold a public hearing per se but also to let them know that we can hear their voices out there and we want to do something about it. So I would hope that you would use your foundation to do that.

Ms. CARSTENS. I would be happy to.

Mr. GRAY. And if you could supply for the record some numbers of the people that you think are not able to get any kind of medication that desire it. I understand that some because of the toxic effect are turning it down. We heard statements yesterday I think that about twenty-five percent of the veterans that could get it are not taking it, because they have talked to someone who has been taking it, and they thought that it was not for them. So you have got to delineate that, those who want it and those who do not want it. So if you could get us some numbers, I think that would be helpful.

Ms. CARSTENS. I would be happy to.

Mr. GRAY. Thank you, Mr. Chairman.

Mr. ROWLAND OF GEORGIA. If you can provide that information to Dr. Ditzler, I am sure that he will get it to us.

And Mr. Gray, I want to thank you for focusing on the fact that while this is a hearing related to the Veterans' Administration that it also is the relationship of the Veterans' Administration and the treatment of the various aspects of this disease to the public in general.

Mr. GRAY. I did not mean to imply, Mr. Chairman, that the VA was not interested in working with the outside community.

Mr. ROWLAND OF GEORGIA. Oh, I know that you did not.

I want to thank you very much for your testimony. I have one additional question that I want to ask, one final question. I am going to ask Dr. Jones if he would mind coming back up.

Mr. GRAY. Since we have one minute left.

Mr. ROWLAND OF GEORGIA. We have five. We try and make it work right down to the wire.

Mr. GRAY. You did a magnificent job, Mr. Chairman.

Mr. ROWLAND OF GEORGIA. You are very kind.

Dr. Jones, we have talked a lot about AIDS and about many problems. Dr. Cherry said that right now there is not much positive about it, that it is mostly negative.

What hope do we have to look forward to in addressing this problem?

Dr. JONES. Sir, there are a lot of positives. Already we have been able to isolate the virus, its clone, and its sequence. We can isolate the envelope protein of the virus which will help us make a vaccine. And as we speak, vaccines are being tested. In addition to that, there are some new drugs, experimental drugs, coming down

the line which hold hope for some of those individuals who have already contacted the disease.

We also know quite a bit now about this organism and how it enters the body. And knowing that, then we with further study can perhaps provide some sort of barriers for the unnatural to prevent this virus from entering. So I think that there is a lot of hope on that horizon.

And I am also delighted that all of you have come here. It is a thrill to see the interest that Congress has in this disease and in helping us go out on the front lines to try and do something about it.

Mr. ROWLAND OF GEORGIA. Thank you very much, and we appreciate you giving us the help. We will keep working on this on the congressional level as I know you will in the medical community in the areas of ethics, religion, and law. And I again want to express my appreciation to everyone for having made these three days such a great success from our standpoint.

Mr. GRAY. Mr. Chairman, I just want to say that I have been to a million hearings I think, and that the best way to end a hearing is on a positive note. This one has.

Ms. PELOSI. Mr. Chairman, I want to thank you for calling for these hearings in San Francisco and for coming, and as I say again for your generosity and time for visiting some of the sites yesterday. I think that one thing which you have heard is that the federal government does not appear to be as attentive as it should have been to this issue over time. Certainly, I hope that the message will be that that has changed, and it will be because of your good work.

I hope that the commission when it comes together will not think incrementally about funds for AIDS research, or education, or patient care, but rather view the whole problem, see what the need is, and fight for the amount of money that is needed rather than X percent over last year.

I was very pleased with Congressman Gray's comments. You have heard him say it now three times. First, he said turn every stone. Secondly, he said do whatever it takes. And the third time it was even more positive than that, to assure people who are afflicted or people who are menaced by AIDS, which is our whole society, that Congress will do what it takes to make sure that it goes away, and that does not mean 10 percent more than last year.

But again I want to thank you, and the committee, and the staff of the committee for coming to San Francisco. Again it gives us hope. And I think that the combination of your enthusiasm and the resources that we have here in the VA will give our people who are afflicted hope as well. Thank you.

Mr. ROWLAND OF GEORGIA. I thank everyone on the committee. I thank you all very much.

[Whereupon, at 12:06 p.m., the subcommittee was adjourned, subject to the to the call of the Chair.]

APPENDIX

NANCY PELOSI
8TH DISTRICT, CALIFORNIA

1632 LONGWORTH BUILDING
WASHINGTON, DC 20515-0508
(202) 225-4965

DISTRICT OFFICE:
FEDERAL BUILDING
450 GOLDEN GATE AVENUE
SAN FRANCISCO, CA 94102-3490
(415) 556-4862

COMMITTEES:
BANKING, FINANCE
AND URBAN AFFAIRS
GOVERNMENT OPERATIONS

Congress of the United States
House of Representatives
Washington, DC 20515-0505

STATEMENT BY REPRESENTATIVE NANCY PELOSI

BEFORE THE VETERANS' AFFAIRS COMMITTEE

Veterans Administration Medical Center
San Francisco, California
August 21, 1987

Mr. Chairman, I am delighted that your committee has chosen to hold public hearings on operational aspects of AIDS research and medical care within the VA. I am also delighted that you have chosen San Francisco as the place to hold these hearings.

As you know, San Francisco has been one of the cities hardest hit by the AIDS epidemic. As of the end of July San Francisco recorded 3,545 cases of AIDS and 2,094 deaths due to AIDS. Last month alone San Francisco reported 143 new cases or nearly five new cases each day. It is difficult to even imagine the impact that AIDS has already had on this city. And, we fear that the worst is yet to come.

Research needs adequate funding and needs to be coordinated. San Francisco is a major research center. As today's witnesses will demonstrate, the VA is strategically important in advancing AIDS research. I commend Dr. Zeigler and his colleagues at the VA on their leadership role in assuring that the VA research agenda is integrated into the total research effort in the City and across the country.

This City takes particular pride in developing prevention efforts. The rate of new infections among gay men in San Francisco is extremely low. This

would not have been possible without the work of the San Francisco AIDS Foundation, the Department of Public Health, and other community agencies that have responded with clear prevention messages to those communities at risk. Now ethnic minority communities need to be the focus of the City's expanded efforts. I trust that San Francisco will meet this need and again be a model for the rest of the country. Fortunately we have representatives from the San Francisco AIDS Foundation with us here today.

To date, sadly, the federal government has not taken the kind of leadership role it should in AIDS patient care and treatment. Much needs to be done in terms of identifying barriers to delivering the needed services and developing appropriate financing and reimbursement mechanisms for these services. Earlier this week when we met with the staff of the VA Medical Center, I was impressed with their caring and dedication. I was also impressed with their understanding of what needs to be done to finance a response to the AIDS crisis in health care. It is clear that more money is needed for patient care and treatment. Models need to be developed which are responsive to the unique nature of this disease. To this end, we must work with the VA and other resources in developing appropriate treatment strategies necessary to respond to AIDS.

San Francisco has been at the forefront of developing a humane response to AIDS. It has done so through a very high level of volunteer activity. It is clear that this level of volunteer participation cannot go on indefinitely. Policy makers at the federal, state, and local level must not focus narrowly on the next year of two years but must extend their vision to five or more years and what

STATEMENT OF THE HONORABLE J. ROY ROWLAND
SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE
COMMITTEE ON VETERANS' AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
SAN FRANCISCO, CALIFORNIA
AUGUST 21, 1987

THE HEARING WILL COME TO ORDER.

GOOD MORNING. WELCOME TO THE COMMITTEE ON VETERANS' AFFAIRS SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE HEARING CONCERNING ACQUIRED IMMUNE DEFICIENCY SYNDROME, OFTEN REFERRED TO AS AIDS. THIS HEARING IS THE SUBCOMMITTEE'S SECOND RELATING TO AIDS. THE PURPOSE OF THIS HEARING IS TO INVESTIGATE THE OPERATIONAL ASPECTS OF AIDS RESEARCH AND MEDICAL CARE WITHIN THE VETERANS' ADMINISTRATION. EXPERIENCES IN MEETING TREATMENT DEMANDS OF AIDS PATIENTS IN VA FACILITIES, THE COMMUNITY AND THROUGH VA/DOD SHARING AGREEMENTS, WILL BE EMPHASIZED AS PART OF DEVELOPING A NATIONAL POLICY ON AIDS.

IT IS ALTOGETHER APPROPRIATE THAT THIS SUBCOMMITTEE IS INVOLVED IN THE PUBLIC HEALTH CRISIS PRESENTED BY AIDS. THE VETERANS' ADMINISTRATION IS THE LARGEST HEALTH CARE SYSTEM IN THE UNITED STATES -- AND IN FACT IN THE WESTERN WORLD. AS SUCH, IT HAS BEEN CONDUCTING RESEARCH ON AIDS AND HAS TREATED OVER 2,000 AIDS PATIENTS SINCE 1983. A CASELOAD OF ANOTHER 12,000 IS EXPECTED BY 1991. SAN FRANCISCO, PERHAPS BETTER THAN ANY OTHER CITY IN THE WORLD, UNDERSTANDS WHAT THOSE NUMBERS MEAN IN TERMS OF RESOURCE DEMANDS AND PERSONAL ANGUISH.

INDEED, WE HAVE NEVER FACED A DISEASE SO DEADLY, SO RAPIDLY SPREADING, AND WITH SUCH COMPLEX MORAL, LEGAL, AND POLITICAL RAMIFICATIONS AS AIDS. THE LEVEL OF EMOTION, THE DIVERSITY OF OPINION, AND THE INTENSITY OF PHILOSOPHICAL ARGUMENTS WHICH HAVE COME TO DOMINATE THE DISCUSSIONS AND DEBATES REGARDING A NATIONAL PUBLIC HEALTH RESPONSE PARTLY RESULT FROM A LACK OF KNOWLEDGE AND FROM FEAR. AS A PHYSCIAN AND AS AN ELECTED MEMBER OF CONGRESS, I BELIEVE IT IS TIME TO MOVE FORWARD, AWAY FROM FEAR AND IGNORANCE.

THE REAL PROBLEM IS TO DECIDE HOW TO MOVE FORWARD. TOWARD THAT END, I INTRODUCED LEGISLATION THAT HAS BEEN PASSED BY THE HOUSE OF REPRESENTATIVES. THIS LEGISLATION, H. R. 2881, AS

AMENDED, WOULD ESTABLISH A 15-MEMBER NATIONAL COMMISSION TO CONSIDER AND ADVISE THE CONGRESS AND THE NATION ON THE APPROPRIATE ROLES FOR FEDERAL, STATE, AND LOCAL GOVERNMENTS, AS WELL AS THE PRIVATE SECTOR, REGARDING AIDS RESEARCH, TESTING, CONFIDENTIALITY OF TEST RESULTS, TREATMENT AND CARE OF AIDS PATIENTS, PREVENTION OF TRANSMISSION, AND EDUCATION. THE COMMISSION'S MEMBERSHIP WOULD INCLUDE RECOGNIZED EXPERTS IN THE SCIENTIFIC AND MEDICAL COMMUNITIES. I ENVISION THIS COMMISSION AS SUCCESSFUL AS THE PANEL FORMED IN 1983 TO SALVAGE THE SOCIAL SECURITY SYSTEM WHERE PARTISANSHIP AND PERSONAL INTERESTS WERE PUT ASIDE IN FAVOR OF SOLVING A SERIOUS SOCIETAL PROBLEM.

SOME PEOPLE HAVE ASKED HOW THIS COMMISSION WOULD DIFFER FROM THE PANEL APPOINTED BY PRESIDENT REAGAN. THE H. R. 2881 COMMISSION HAS TWO IMPORTANT CHARACTERISTICS DIFFERENT FROM THE PRESIDENT'S COMMISSION. FIRST, THE MEMBERSHIP WOULD INCLUDE RECOGNIZED EXPERTS IN MEDICINE AND SCIENCE. SECOND, THE COMMISSION REPORTS TO THE CONGRESS--THE LEGISLATIVE BRANCH OF OUR FEDERAL GOVERNMENT.

ON BEHALF OF THE COMMITTEE, I WANT TO THANK OUR WITNESSES FOR TAKING THE TIME TO BE WITH US TODAY. I HAVE BEEN IMPRESSED WITH THE DEDICATION AND INTELLECT THAT CHARACTERIZE THE WORK OF OUR WITNESSES TODAY AS THEY HAVE GRAPPLED WITH THIS EPIDEMIC. THE LESSONS THEY HAVE LEARNED ARE VALUABLE AND SHOULD BE DISSEMINATED ACROSS THE NATION. THE COMMISSION CREATED BY H.R. 2881, AS AMENDED, IS A GOOD VEHICLE FOR THAT PURPOSE.

I AM PLEASED TO CHAIR THIS HEARING IN BEHALF OF THE DISTINGUISHED CHAIRMAN OF BOTH THE FULL VETERANS' AFFAIRS COMMITTEE AS WELL AS THE SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE, THE HONORABLE SONNY MONTGOMERY. I'D LIKE TO THANK--PERSONALLY AND FOR THE SUBCOMMITTEE--DR. DITZLER, DIRECTOR OF THE VA MEDICAL CENTER HERE IN SAN FRANCISCO AND PREVIOUSLY CHIEF MEDICAL DIRECTOR OF THE VA, FOR HIS ASSISTANCE IN PREPARING FOR THIS HEARING.

NOW, I WOULD LIKE TO RECOGNIZE THE OTHER MEMBERS OF THE HOUSE OF REPRESENTATIVES WITH ME TODAY.

THE HONORABLE KEN GRAY OF ILLINOIS IS A HARD-WORKING MEMBER OF OUR SUBCOMMITTEE, WHO HAS A LONG-STANDING DEDICATION TO PROVIDING QUALITY HEALTH CARE TO OUR NATION'S VETERANS. I'M SURE

IT'S NOT NECESSARY FOR ME TO INTRODUCE THE HONORABLE NANCY PELOSI, YOUR OWN VERY CAPABLE REPRESENTATIVE, WHOSE GRACIOUS HOSPITALITY AND ASSISTANCE HAS MADE OUR STAY IN SAN FRANCISCO VERY PLEASANT. OUR VISITS TO VARIOUS VA AND NON-VA MEDICAL FACILITIES HAVE BEEN PRODUCTIVE AND EDUCATIONAL AND I AM LOOKING FORWARD TO THIS MORNING'S TESTIMONY. I WILL NOW RECOGNIZE MY COLLEAGUES FOR ANY REMARKS THEY MAY WISH TO MAKE.

WELCOMING STATEMENT OF REPRESENTATIVE BARBARA BOXER TO THE COMMITTEE FOR VETERANS AFFAIRS, SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE FIELD HEARING.
SAN FRANCISCO V.A. MEDICAL CENTER AUGUST 21, 1987

CHAIRMAN ROWLAND, MEMBERS OF THE SUBCOMMITTEE ON HOSPITALS AND HEALTH CARE, WELCOME TO THE SAN FRANCISCO VETERANS ADMINISTRATION MEDICAL CENTER. IT IS WITH BITTERSWEET PRIDE THAT I WELCOME YOU TO THIS FACILITY, A PIONEER IN INNOVATIVE RESEARCH AND TREATMENT OF VETERANS AT RISK OR INFECTED WITH THE HUMAN IMMUNODIFICIENCY VIRUS (HIV). I WANT TO COMPLIMENT THE STAFF OF THE MEDICAL CENTER, IN PARTICULAR DR. DIETZLER AND DR. ZIEGLER, FOR THE OUTSTANDING CONTRIBUTION THEY HAVE MADE IN THE NATIONAL EFFORT TO FIGHT AIDS.

DR. JOHN ZIEGLER, ASSOCIATE CHIEF OF STAFF FOR EDUCATION, SAN FRANCISCO VETERANS ADMINISTRATION MEDICAL CENTER ESTIMATES THAT 3 - 5% OF THE TOTAL MALE POPULATION OF SAN FRANCISCO WILL DEVELOP OF AIDS IN THE NEXT 5 YEARS. IN TOTAL NUMBERS, THE DEPARTMENT OF HEALTH FOR THE CITY AND COUNTY OF SAN FRANCISCO ESTIMATES CONSERVATIVELY THAT THERE WILL BE 10,380 CUMULATIVE CASES AND 6,000 - 7,000 INDIVIDUALS ALIVE WITH AIDS IN 1991 IN SAN FRANCISCO. MANY OF THESE INDIVIDUALS WILL BE VETERANS. WITH FORESIGHT, THE STAFF OF THE MEDICAL CENTER ACTED DECISIVELY ON THE EPIDEMIOLOGICAL PREDICATIONS AND TOOK EARLY ACTION IN DESIGNING INNOVATIVE RESEARCH AND TREATMENT PROGRAMS. THEY HAVE BEEN A MODEL FOR OTHER VA MEDICAL

(CONTINUED)

CENTERS, BOTH IN REACHING OUT TO THE LARGER COMMUNITY, AND IN WORKING WITH THE RESEARCH FACILITIES AT THE UNIVERSITY OF CALIFORNIA, SAN FRANCISCO AND SAN FRANCISCO GENERAL HOSPITAL IN PROVIDING HUMANE, COST-EFFECTIVE PATIENT CARE. THEIR PROGRAMS DESERVE TO RECEIVE THE CAREFUL EXAMINATION, AND WHERE POSSIBLE, IMITATION OF OTHER VA MEDICAL CENTERS THROUGHOUT THE NATION.

AS CHAIR OF THE AIDS TASK FORCE OF THE HOUSE BUDGET COMMITTEE, I AM DEEPLY CONCERNED ABOUT CONTROLLING THE SPREAD OF HIV INFECTION AND CARING FOR THOSE WHO ARE INFECTED OR SICK. WITH AN ESTIMATED 1 1/2 MILLION AMERICANS INFECTED, WE MUST BEGIN TO UTILIZE THE SUCCESS OF THE TREATMENT AND RESEARCH PROGRAMS AT THIS FACILITY TO FORGE A COMPREHENSIVE, NATIONAL STRATEGY TO FIGHT AIDS. WITHOUT A VACCINE ON THE HORIZON, HIGHEST PRIORITY MUST BE GIVEN TO PREVENTION AND EDUCATIONAL ACTIVITIES TO ASSIST THOSE AT RISK OF HIV INFECTION. ADDITIONALLY, WE MUST DEVOTE INCREASING RESOURCES TO DEVELOP THERAPEUTIC AGENTS TO KEEP INFECTED INDIVIDUALS AS HEALTHY AND PRODUCTIVE AS POSSIBLE. THIS FACILITY, MORE THAN ANY OTHER VA MEDICAL CENTER IN THE NATION, HAS BEEN SUCCESSFUL IN THESE ACTIVITIES.

I COMMEND MY COLLEAGUE'S ATTENTION TO THIS NATIONAL HEALTH CRISIS. I LOOK FORWARD TO WORKING WITH THE STAFF OF THE VA MEDICAL CENTER AND MY CONGRESSIONAL COLLEAGUES IN THE COMING BUDGET CYCLE TO BRING EVERY REASONABLE RESOURCE TO BEAR TO STOP THIS EPIDEMIC.

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RUDI SCHMID, M.D., DEAN
SCHOOL OF MEDICINE

513 PARNASSUS AVENUE - S-224
SAN FRANCISCO, CALIFORNIA 94143-0410
(415) 476-2341

SUMMARY OF TESTIMONY AT SUBCOMMITTEE HEARING (8/21/87)

The current era, blessed with so much that is hopeful and exciting in areas such as computer technology, space exploration, and biomedical research, is at the same time brutalized with the deadly epidemic we know as AIDS. By the mid-1990s, there will probably be one to three million cases of the disease, and it is clearly moving out of the homosexual population through bisexual contact, blood transfusions, intravenous drug use, and from mothers to fetuses. And because of the high and protracted morbidity rate of the disease, and its target group of younger people and infants, its impact is likely to dwarf cancer and heart disease both in terms of emotional tragedy and health care economics. At this time, neither a cure nor a vaccine is on the horizon.

San Francisco is the second largest epicenter in the country after New York City, and has had a 50% increase in reported cases this month over last month. With 3,802 current active cases in the city, all of San Francisco's hospitals are involved in the epidemic. San Francisco General Hospital (SFGH), one of the three teaching hospitals closely integrated with the University of California at San Francisco School of Medicine (UCSF), takes the lead as an internationally renowned center for AIDS research and patient care.

Another teaching hospital integrally affiliated with UCSF is the San Francisco Veterans Administration Medical Center, which is itself heavily involved in the AIDS crisis. Its staff currently cares for over 200 active cases, a number that is likely to increase further in the near future. In developing its AIDS care and research programs, the VAMC was able to draw extensively on the resources of the UCSF School of Medicine. In fact, the AIDS emergency dramatically illustrates the uniquely effective teamwork characterizing the close affiliation between the SFVAMC and the UCSF School of Medicine. It is the teamwork of two institutions based on a three-legged stool composed of research, education, and patient care. Each component enhances the other; none can effectively function alone. As with all health issues -- but emphatically so in the case of AIDS -- the best research plus the best teaching equals the best patient care. UCSF is one of the country's premier medical schools, and the SFVAMC is one of the crown jewels in the VA hospital system, a hospital ranking among the very top among American teaching and research hospitals. The combination is incomparable.

The VA Central Office is in the process of establishing a small number of AIDS research centers at VA medical centers. It is logical and imperative that one of these centers be located in San Francisco for all the reasons outlined above. San Francisco is a two-headed giant on the international AIDS scene: a major epicenter for the disease, it is also a major research center. The patient population is large, the investigators highly trained and motivated, the teamwork among the SFVAMC, SFGH and UCSF extremely effective, the resources and potential at UCSF superb. The SFVAMC itself has a unique program in intestinal immunity, an area which is very germane to the question of how the AIDS virus enters the body. The prerequisites for major biomedical breakthroughs in this devastating plague are here in San Francisco. I urge Congress, therefore, to lend its strongest support to enhancing the AIDS research and patient care programs in the VA system by selecting the SFVAMC as a location for one of the new centers. Let the seed be planted in fertile soil. And may it bring a definitive close to this grisly world chapter on AIDS.

Testimony of John W. Ditzler, M.D.
Director, San Francisco VA Medical Center
before the
Committee on Veterans' Affairs - U.S. Congress
Subcommittee on Hospitals and Health Care
August 21, 1987 at San Francisco

You have asked that we address the impact a new disease complex has had upon this Medical Center. Acquired Immune Deficiency Syndrome, whose acronym is AIDS, results in some humans who have been selectively exposed to a retrovirus known as HIV (human immunodeficiency virus) and who develop antibody response to this virus. At this time it appears that many of those who become HIV positive in time go on to develop a number of opportunistic disease states categorized as AIDS or similarly categorized as ARC or Aids Related Complex. Clearly none of the classification systems - be it CDC, Walter Reed or others - satisfies all needed criteria. In any event, the terms AIDS and ARC are so limited in definition that we propose the larger HIV positive related terms. I will return to this point shortly.

Your Chairman asked that we address the operational aspects on medical care as well as research in a VA Medical Center and speak to the experiences in meeting treatment demands here as well as in the community. We have many collegial and community relationships of which we are quite proud - some of whom are here with you today. We are most proud of our Chief of Research who will be outlining our pride in this Center's research as well as the community's cohesiveness on this epidemic. I might here say that San Francisco City and County's experiences are, I feel, different than other major cities where the AIDS epidemic is present - primarily in the community-wide understanding of the plight of these patients and the type groups from which they come. The caring in San Francisco permits outpatient and hospice type care - care not otherwise possible; and at the same time the concern of certain groups relative to privacy from HIV testing results makes us all most appreciative for the VA posture supporting voluntary testing.

I would emphasize, as earlier when I introduced the topic of HIV positive responses, there is a diversity of syndromes - AIDS and ARC

and no disease now present - that depends on a time factor that used to be thought of as within 2 years of infection and now is believed may be dormant 5-10 years and perhaps more. Since there is considerable evidence that nearly all HIV positives eventually proceed to opportunistic states and since the mortality rate is incredibly high, (there being no known cure as of now) the operational expenses we have had suggest too little attention has been paid to our plea that the cost of Health Care begins the moment an HIV positive state is determined. Likewise, it is important to support the view that these expenses are recurring costs. No longer dare we relate health care costs to fully diagnosed AIDS; ARC cases can be even more expensive - and just being an HIV positive insures need for repetitive testing and differentiated diagnostic tests of each complaint. An additional observation on costs - inpatient cost might even be less than repetitive outpatient visits; so let's not talk only about "total number of AIDS inpatients" or "funding for Diagnosed AIDS Patients." Suffice to say a DRG per se for AIDS is not a proper approach to costs of care any time. In the VA our RAM (Resource Allocation Methodology) is wholly inappropriate, not only because of the non-DRG relationship but any kind of epidemic cost reimbursement is impossible under the current RAM system. RAM data are already two years old, reflecting only that done in 1985 in this year's budget.

Early on in VA experience, for example in the early 1980's, the requests for data first applied to AIDS cases, and only since 1985 have we locally separated the related ARC caseload for various statistical purposes. VACO then began asking for inpatients per average day. The data of interest for this hospital is attached as Appendix A. You will note the decided increase of new cases a year and further of note is the now increasing caseload of HIV positives not classified as AIDS per se. The VA system is, I believe, now joining our new registry attempts of responding to statistics for demographic purposes, disease related treatment team needs, case reports and system tracking. Of major concern to a healing facility is the privacy protection of patient and peer data and still being responsive to system demands. Of equal - no, of even greater importance - is to establish a realistic yet

non-exaggerated base for resource supplementation, which up until now has mostly been ineffectual. In addition to the list in Appendix A I need sadly recall some 10-15 employees no longer alive who had AIDS by reason of other life style events - not health care provider contamination. Corbin Cherry, our Chaplain; a Vietnam vet has a unique and praiseworthy host of observations in this area which deserve further elucidation.

From an operative viewpoint, two additional topic areas need be covered: (a) the social, psychological and spiritual impact of HIV positive infections; (b) The expense impact of close monitoring and repeated testing of an asymptomatic HIV patient and the new American Hospital Association mandates on prophylaxis: added together grossly amplifies concerns about funding adequacy.

The American Hospital Association as of July 17, 1987, is recommending that hospital workers wear protective gear whenever they are exposed to blood or body fluids - even when the patient has not been diagnosed as having an HIV infection. Although we at San Francisco have not yet gone that far - we do treat an AIDS patient as if he/she had an infectious hepatitis. With those well known precautions we have no indication of inadvertent transmission. We do believe that lab techs and blood drawers may all need to use gloves; and the dental clinic surely must re-examine use of gloves, masks and certainly better air evacuation systems and wall cleaning because of higher speed drills and tissue fluids aerosolization. In our hospital this will cause significant expenditures. Additional costs not normally envisioned occur in an attempt to get patients out of hospitals into home with relatives earlier - one example is Appendix B, home prosthetic supplies of nearly $1700.

Dr. Jones will address specific areas but, for the record, I'd like to append a summary of our recent proposal to further develop a VA Center for AIDS Research and Education - acronym - VACARE. We likewise have this entered in Region 6 as a MEDIPP initiative. This proposal simply enlarges upon an already effective CORE Program. Clearly this Center is marching forward. (Appendix C)

Mr. Chairman, in closing I need to place the operational and research impact together with the characteristics of the disease, some of the characteristics of people in society today, and particularly to call attention to the impact on the health care personnel themselves. Because retro-viruses integrate into the target cell genome as pro-viruses, each time a cell replicates itself and divides, it copies and carries the viral genome with it. It must be therefore assumed that individuals who have been infected with HIV are infected permanently. I might say parenthetically, Mr. Chairman, it is believed that the only way the HIV virus does replicate is to get actually into the cell. In short, HIV is a relatively complex virus about which much has been learned in the three years since its identification, but it is a difficult, changing scene almost as if it were a chameleon. Much of society is frightened, and I refer you to an editorial in the New York Times a week or so ago which was titled, "When Doctors Refuse to Treat AIDS." "The fear of AIDS has produced its most painful symptom yet, doctors and dentists who refuse to treat patients they believe to be infected with the AIDS virus. Said one who was a heart surgeon, "I've got to think about myself. I've got to think about my family. That responsibility is greater than to the patient." The New York Times then bluntly says, (and I certainly agree), "any physician who holds that belief needs a new profession." Thank God we have not had that in San Francisco! Nonetheless, Mr. Chairman, I believe that the concern over AIDS, whether rational or not, is impacting society such that education is required in an accelerated and in a profound way, not only to dispell concerns held by the families of patients with a postive HIV test, but for health care workers in general and for society as a whole.

I would close with an observation made in the AMA Newsletter of July 31, 1987, where psychiatrist, John Barlow, M.D., who has a large psychiatric practice among people with AIDS and the health workers who treat them said, "the nation will soon face a major push for expanded mandatory testing, but I do not see a similarly strong push for counseling and programs for those who must face the consequences of positive tests."

Mr. Chairman, let me say that we here in San Francisco are delighted that the testing is on a voluntary basis, and we understand a "thank you" is in order. We believe the question of "mandatory" first requires exploration of what we will do about it then. Continuing in a similar vein, Steve Yarnell, M.D., a psychiatrist who himself has AIDS states, "the meaning of a positive test has changed dramatically in the past few years. In 1982 the medical profession was saying that if you made it two years after a possible exposure to AIDS you were safe. Then the time lag was pushed back to five years, then six, then seven or eight and now 10 and 12 or longer. Additionally it was first thought that only 10% of those exposed would actually become ill. Now the figures are 70-80% after some years and some fear that everyone infected will eventually become ill. So the person who tests positive faces severe anxiety."

Mr. Chairman, we are indeed faced with an important epidemic. I am proud to represent a medical center that I believe is on the forefront of meeting the challenge. The challenge is education of (1) the public relative to sexual and blood transmissions; (2) good health care prophylaxis between and among health care workers and patients, especially in ICU's and Dental chairs and laboratory blood drawers; (3) education in what to do if HIV test is positive, before any massive testing program - scare tactics are not education. The challenge is in a difficult research area and the challenge is money. The VA is indeed a medical care leader and a research leader.

I will be happy to answer any questions the Committee has or to introduce others of the panel.

APPENDIX A

HIV CASELOAD
VA Medical Center, San Francisco, California

1. Active Patient Caseload now followed in Infectious Disease Center:

AIDS[1]	54
ARC	74
High Risk (HIV positive, sexually-transmitted diseases, individual drug abusers)	47
Total:	175

2. Patients on "Drug Protocols" currently: (some of whom are duplicated in the count above)

AZT	31
DHPG	1
Amphotericin	1

3. Total Deaths - 1981 to present: (excluded in above count)

AIDS[1]	90
ARC	4

4. NEW Cases of AIDS[1] reported to CDC by calendar year:

1981	1
1982	5
1983	7
1984	20
1985	28
1986	41
(1987 (Jan.-June only)	44
(New cases of ARC - Jan. to 7/31	25
(New cases of HIV+ pts. "	20

[1]Center for Disease Control Criteria

APPENDIX A

DESCRIPTION OF CENTER

The VA Medical Center, affiliated with the University of California San Francisco, has played a major role in AIDS Research in Northern California. We now propose to unify and expand our clinical and research activities as a formal research center. We propose the acronym VACARE (VA Center for AIDS Research and Education).

GOALS

The VA Center for AIDS Research and Education (VACARE) will undertake three broad missions.

(1) We will consolidate all clinical activities (outpatient and inpatient) to a centralized area to facilitate multidisciplinary care, counselling, clinical trials and patient follow-up. As part of this expanded clinical program we will develop improved and cheaper methods of immunodiagnosis of opportunistic infection and assessment of immune function in the Clinical Pathology Service. We will conduct epidemiologic studies to track the natural history of illness, monitor cost of care, and establish an AIDS registry model for other VA facilities. Using our clinical data base of over 250 patients, we have already developed a registry to track all patients in the system using the VA computer; we propose that this registry become a nationwide resource.

(2) The basic research programs relevant to AIDS/HIV focus on the immune systems of the lung and gastrointestinal tract. Our collective expertise on mucosal immunity will be invaluable in studying the pathogenesis of AIDS infection through the mucosal barrier. Our work in protein attachment at the mucosal level is particularly germane to AIDS pathogenesis. This is a critical but neglected area of AIDS research. The construction of a P3 biohazard laboratory will avail our investigators of HIV reagents and will permit experiments dealing with problems of host cell range, immune interventions, development of animal models, and basic virus/cell interactions. In addition we will use the new NMR facility to study metabolic aspects of AIDS Dementia Complex and AIDS-associated neoplasia. Finally, the Pulmonary and GI immunology groups are interested in the pathogenesis of lung and GI plasmodial infectious in AIDS.

(3) Recognizing that prevention and education are the only practical means to control the AIDS epidemic, we will establish a regional Education and Training Center, linked to the Interwest RMEC, that will educate and train VA health care workers, counsel patients, and distribute prevention information to subjects at risk. This undertaking will be linked to regional efforts by the VA and DOD to provide effective training for health care workers and counseling for HIV carriers. A prominent education research component will be proposed.

(4) We propose that the Library Service develop a computer-based AIDS/HIV Information Center to avail investigators of rapid search and retrieval capability in the burgeoning AIDS database. This resource

will be unique in the Bay Area and can serve the needs of other VA Medical Centers on the West Coast.

RESEARCH FOCUS

(a) Clinical Research: We are current participants in eleven clinical trials conducted under the auspices of the UCSF AIDS Clinical Research Center and the VA Cooperative AIDS Study Group (see Appendix 1). These trials are directed toward: alleviation of symptoms; prevention of disease progression; anti-viral treatment; and management of AIDS associated infections and neoplasms. Another research focus is the development of diagnostic and evaluative laboratory techniques to increase sensitivity and specifity and decrease costs. We will address the following areas: immunodiagnosis of plasmodial infection; evaluation of immune function and monitoring lymphocyte phenotypes. Clinical research projects also extend to participation in Bay Area epidemiologic studies on risk and natural history of AIDS. Finally, we collaborate with the UCSF School of Dentistry on studies of the diagnosis and treatment of oral manifestations of AIDS.

(b) Laboratory Research: A number of clinical and basic scientists on our staff have been studying problems relevant to AIDS. We are particularly interested in the associated neoplasms (Ziegler, Valone, Meeker, Deisseroth, Weiner), immunopathogenesis (Seaman, Wofsy), pulmonary immunology (Kaltreider, Shellito) and associated infections (Blumenthal, Griffiss, Tager, Jensen). Because natural HIV infection is predominately by a mucosal route, our GI-immunology group (Heyworth, Owen, Kim, Jones) is particularly interested in examining natural and acquired immunity to HIV at the mucosal level. We propose to use the primate model established by Murray Gardner at UC Davis as part of this project. This neglected line of inquiry will have important implications for HIV susceptibility, pathogenesis, and vaccine development.

(c) Education Research: In collaboration with behavorial scientists from the UCSF School of Nursing and Langley Porter Institute, we are developing education research projects to examine relevant aspects of STD transmission and substance abuse in veterans. We are preparing proposals for funding for evaluation of various education and training techniques for health care workers. There is also a need for patient counselling manuals (one of which we developed). The effectiveness of various patient counselling modes (individual, group, mediated) and behavioral outcomes will be studied.

ABILITY TO CARRY OUT PROJECT:

The UCSF AIDS Clinical Research Center (ACRC), under a grant from the State of California, has been under the direction of Dr. John Ziegler (ACOS/E), since 1985. This Center coordinates all AIDS clinical research on the UCSF campus and supports a network of AIDS clinics, clinical trials statistical center, specimen bank, and epidemiology consortium. The ACRC also administers small grant awards for peer-reviewed clinical studies of merit. Thus, Dr. Ziegler has broad knowledge of clinical and basic AIDS research projects and has demonstrated administrative skills as the ACRC Director. In addition,

Dr. Ziegler is co-principal investigator (with Dr. Paul Volberding) in a broad-based Program Project grant funded by NIAID to study the pathogenesis of AIDS. Thus, VACARE will have access to a large group of AIDS investigators on the UCSF campus.

Dr. Martin Heyworth is a nationally recognized expert in gastrointestinal immunology and has recently completed a definitive textbook on the subject. As Scientific Director for VACARE, Dr. Heyworth will concentrate on the problems of HIV penetration and infection at the mucosal level, and coordinate various related investigations in AIDS immunology.

APPENDIX A[1]

AIDS PATIENTS TREATED DURING OCTOBER & NOVEMBER 1986
VAMC - SAN FRANCISCO, CALIFORNIA

SS#	ADMITTED	DISCHARGED	DIAGNOSES	DRG#	'87RAM WWU
AP 0414	10/22/86	10/22/86	173.9, 279.19, 99.25	283	31
	11/05/86	11/05/86	173.19, 279.19, 99.25	283	31
	11/14/86	11/21/86	486, 173.9, 33.22	89	47
TG 0333	09/25/86	10/04/86	136.3, 117.5, 321.0, 279.19, 33.23, 48.23	79	85
TP 5593	10/28/86	11/04/86	136.3, 279.19	79	85
BB 3582	11/09/86	11/13/86	136.3, 279.19, 785.6 (Exp.)	79	85
EK 3063	10/11/86	10/25/86	136.3, 173.9, 279.19	79	85
JT 1829	10/17/86	10/24/86	173.8, 279.29, 287.3, 593.9, 280.9, 41.31, 33.23, 99.25	283	31
GP 1360	10/02/86	10/09/86	117.5, 321.0, 279.19 727.51, 03.31	423	53
DD 9909	11/09/86	11/29/86	Chart not ready for coding		
SK 3804	10/03/86	10/09/86	117.5, 321.0, 279.19 280.9	423	53
	10/10/86	10/19/86	117.5, 99.25	423	53
	10/13/86	10/13/86	117.5, 99.25	423	53
	10/15/86	10/15/86	117.5, 321.0, 279.19, 99.25	423	53
	10/17/86	10/17/86	117.5, 321.0, 279.19, 99.25	423	53
	10/20/86	10/20/86	117.5, 321.0, 279.19, 99.25	423	53
	10/22/86	10/22/86	117.5, 321.0, 279.19, 99.25	423	53
	10/24/86	10/24/86	117.5, 321.0, 279.19, 99.25	423	53
	10/27/86	11/24/86	Chart not ready for coding		

SS#	ADMITTED	DISCHARGED	DIAGNOSES	DRG	87 RAM WW
KS 0569	10/02/86	10/02/86	117.5, 321.0, 279.19, 99.25	423	53
	10/07/86	10/07/86	117.5, 321.0, 279.19, 99.25	423	53
	10/09/86	10/09/86	117.5, 321.0, 279.19,	423	53
	10/16/86	10/16/86	117.5, 321.0, 279.19, 99.25	423	53
	10/21/86	10/21/86	117.5, 321.0, 279.19, 99.25	423	53
	10/23/86	10/23/86	117.5, 321.0, 279.19, 99.25	423	53
	10/28/86	10/28/86	117.5, 321.0, 279.19, 99.25	423	53
	10/30/86	10/30/86	117.5, 321.0, 279.19, 99.25	423	53
	10/30/86	11/01/86	117.5, 321.0, 279.19, 284.8	423	53
SK 3804	11/28/86	11/28/86	117.5, 321.0, 279.19, 99.25	423	53
	12/01/86	12/01/86	117.5, 321.0, 279.19, 99.25	423	53

TOTAL: 1540 WWU

From 10/11/86 to 11/28/86 this Medical Center (SF) completed 30 episodes of inpatient AIDS hospitalizations; and at a FY 87 RAM value of 1540 WWU or $78,016.40 at $50.66/WWU - which barely begins to cover cost. Based upon FY 86, cost projections for FY 87 for HIV infections in this Medical Center will be nearly 5 million dollars alone - much of it unfunded per se.

APPENDIX B

HOME PROSTHETICS SUPPLIES

[redacted] - NAME - MIDDLE NAME	2. CLAIM NO.	3. DISABILITY CODES	SC	NSC
4. [redacted]	3. SOCIAL SECURITY NO.	AO/DIS		X
San Francisco, CA [redacted]	361 20 8722			
[redacted]	4. DATE OF BIRTH 11-28-29			

7. HEIGHT	8. WEIGHT	11. OTHER DATA	CARE NO.
6'0	130	Adm: 1-20-87 DX: ARC, Anemia	
9. EYES	10. HAIR	Vettes ~~[redacted]~~ ARC	1

12. RECORD OF APPLIANCES AND/OR REPAIRS FURNISHED

DATE	NO.	TYPE APPLIANCE	N	R	MANUFACTURER OR VENDOR	STATION	SERIAL NUMBER	DELIVERED	COST	ACTION
1987								1987	$	
1-22	1	SmithDavis Bed, Full Elect,SplitSprings	I		Abbey-SF	662			900.00	PO ` am
	1	Trapeze	I						115.00	
	1	pr.Rails	I						97.50	
	1	Mattress	I						153.00	
	1	Overbed Table	I						143.75	
	1	Commode	I						62.00	
1-22	1	Walker	I		Stock	662		1-22	36.06	toHBHC
	1	Depot W/C	I						92.00	
	1	16X18X2 cushion	I						13.45	
	1	LumexTubTransf.Bench	I				6955		N/C	
	1	ShowerHose&Diverter	I						33.30	
	2	Grab Bars 12"	I						20.30	
	1	Raised Toilet	I						29.00	

VA FORM MAY 1966 10-2319 SUPERSEDES VA FORM 10-2319 JAN 1951, WHICH WILL NOT BE USED. RECORD OF PROSTHETIC SERVICES

$1695.36

What was pt's initial need upon admission? (Dx)
N/A Dx/Tx (see attached)

APPENDIX C

LETTER OF INTENT FOR RESEARCH CENTER ON AIDS AND HIV INFECTIONS

July 30, 1987

1. Veterans Administration Medical Center, San Francisco, CA

2. Proposed RCAHI Center Director: John L. Ziegler, M.D.
ACOS/Education

3. Proposed RCAHI Center Scientific Director: Martin Heyworth, M.D.

4. List of VA Investigators Conducting Relevant AIDS/HIV Research:
(See Attached List, Appendix 1)

5. Description of Center (For Details See Attached Narrative, Appendix 2)

   A. Consolidation of Clinical Activities
      1. Develop centralized, multidisciplinary care program
      2. Develop improved, less expensive immunodiagnostic methods
      3. Assess immune function by flow cytometry
      4. Establish AIDS Registry for tracking natural history and cost of care
      5. Facilitate clinical trials

   B. Core Facility for HIV Culture and Reagents
      1. Explore mucosal immunity to HIV
      2. Coordinate mucosal immunity research on AIDS-related pathogens (esp. plasmodia)
      3. Study HIV glycoprotein attachment to mucosa
      4. Use NMR to characterize defects in AIDS Dementia Complex
      5. Continue research on pathogenesis of AIDS-related neoplasia

   C. Education Research and Information Center
      1. Conduct behavioral, psychometric research on impact of AIDS education/counselling
      2. Create AIDS Information Center in library service using computerized databases

John W. Ditzler

JOHN W. DITZLER, M.D.
Director
SFVA Medical Center

APPENDIX 1

LIST OF VA INVESTIGATORS CONDUCTING RELEVANT AIDS/HIV RESEARCH

VA INVESTIGATOR	TITLE OF STUDY	SOURCE	AMOUNT/ PERIOD
John L. Ziegler, M.D.	UCSF AIDS Clinical Research Center	State of Calif.	$2,300,000 1987-88
	Program Project Grant (Basic Research)	NIH PO1	$3,700,000 1987-90
	AIDS Education in Medical School	NIH Contract	$ 194,222 1986-88
	AIDS International Pgm. (Part of Center for AIDS Prevention Studies) (UCSF)	NIH	Supplement Pending
Ira Tager, M.D.,M.P.H.	Registry for Pulmonary Infection in AIDS	NIH Contract	Pending
	Epidemiology of Gram Negative Sepsis	VA Merit	Pending
Peter Jensen, M.D.	VA Cooperative Study of AZT	VA Merit	Funded 1987-89
William Seaman, M.D. (VA Clinical Investigator)	Celular Regulation of Immunity	VA Merit	$ 203,400 1985-88
	Use of Monoclonal Antibodies to Murine Helper Cells as a Model for AIDS	State of Calif.	$ 194,987 1986-88
David Wofsy, M.D.	Treatment of Murine Lupus with Monoclonal Antibody to Helper T Cells	VA Merit	$ 175,200 1986-89
	Regulation of the Host Response to Treatment with Monoclonal Antibodies	State of Calif.	$ 51,000 1987-88

VA INVESTIGATOR	TITLE OF STUDY	SOURCE	AMOUNT/ PERIOD
Robert Owen, M.D. (VA Clinical Investigator)	Lymphoid Follicles and Intestinal Epithelial Structure and Function	VA Merit	$ 175,700 1983-88
	Isolation and Characterization of Peyer's Patch M Cells	NIH	$ 143,088 1985-88
Albert L. Jones, M.D. (Recipient of Middleton Award 1986)	Ontogeny of the Secre- Immune System	NIH	$ 443,466 1987-90
	Growth Factor Regulation of Liver Transport	VA Merit	$ 465,000 1986-91
Young Kim, M.D. (VA Medical Investigator)	Molecular Biology of Mucin in Colonic Adenocarcinoma Cells	VA Merit	$ 827,500
	Molecular Basis of Altered Blood Group Antigens in Colon Cancer	VA (Supp.)	$ 420,000 1985-90
Benfer Kaltreider, M.D.	Mechanisms of Expression and Modulation of Lung Immunity	VA Merit	$ 306,000 1984-89
Judd Shellito, M.D.	Regulatory Mechanisms for Alveolar Macrophage Cytotoxic Function	VA Merit	$ 165,600 1984-87
Michael Weiner, M.D.	Nuclear Magnetic Resonance Spectroscopy of Kaposi's Sarcoma and Brain of AIDS Patients	NIH	$ 120,916 1987-90
	Magnetic Resonance Spectroscopy of Brain and Kidney Transplants	VA Merit	$ 498,000 1987-92
Walter Blumenfeld, M.D.	Pneumocystis carinii pneumonia: A Biological Basis for Treatment	VA (RAG)	$ 48,100 1987-88

VA INVESTIGATOR	TITLE OF STUDY	SOURCE	AMOUNT/ PERIOD
Walter Blumenfeld, M.D.	Pneumocystis Pneumonia: Detection Quantitation and Viability	VA Merit	$ 167,021 Pending
J.McLeod-Griffiss, M.D.	Immunochemistry of Gram Negative Sepsis	VA Merit	$ 233,100 1984-87
	Structural Analysis of Gonococcus Polysaccharide	VA-DOD	$ 746,500 Pending
Tim Meeker, M.D.	Monoclonal Antibody Therapy of AIDS-Associated Lymphoma	ACRC	$ 10,000 1987-88
	Molecular Genetics of AIDS-Associated Lymphoma	NIH-RO1	Pending
	Anti-Idiotype Strategies in Human Lymphoma	ACS	Pending
Martin Heyworth, M.D.	Intestinal Response to a Protozoan Parasite	NIH	$ 178,223 Renewal
Carole Chenitz, R.N., Ph.D.	Adaptation of Young Adults to Genital Herpes	NIH	$ 150,000 1987-89

LIST OF CURRENT/PENDING CLINICAL TRIALS AT VAMC

Principal Investigator	Title of Trial	Date Initiated
Frank Valone, M.D.	Indomethacin in ARC	September, 1987
Peter Jensen, M.D.	VA AZT Cooperative Study	September, 1987
John Ziegler, M.D.	Tumor Necrosis Factor in Kaposi's Sarcoma	August, 1987
Peter Jensen, M.D.	Open Label AZT (now part of ATEU Toxicity Study)	December, 1986
James Brown, M.D.	Steroids in *Pneumocystis carinii* Pneumonia (PCP)	July, 1987
John Ziegler, M.D. Peter Jensen, M.D. Ira Tager, M.D., M.P.H.	a) Cooperative Study of PCP Prophylaxis (UCSF)	December, 1986
	b) Cooperative Study of Aerosolized Pentamidine for PCP	September, 1987
	c) Study of Genetic Markers in AIDS (collaboration with Stephen O'Brien,NCI)	August, 1987
	d) Coumarin/Cimetidine Treatment of Kaposi's Sarcoma	August, 1987
	e) Combination Chemotherapy for AIDS Associated Lymphoma	July, 1985
	f) DHPG (Gancyclovir) for Severe Cytomegalovirus Infection	July, 1985

VETERANS ADMINISTRATION MEDICAL CENTER
SAN FRANCISCO, CALIFORNIA

TESTIMONY OF ALBERT L. JONES, M.D.
Associate Chief of Staff for Research and Development
to the Committee on Veterans' Affairs--U.S. House of Representatives
Subcommittee on Hospitals and Health Care

August 21, 1987

I. Summary of the San Francisco VA Research Program

The San Francisco VA research budget is the largest in the system. With $20+ million a year and 400 employees, it far outranks other VA medical centers and rivals most medical schools. Approximately 105 principal investigators are funded by the Veterans Administration. The $7.4 million the VA provides supports our peer reviewed programs, has provided a solid base for our investigators to build on, and has attracted $13 million from other sources. Our investigators are national and international leaders in areas such as gastroenterology, immunology, oncology, endocrinology, and cell biology.

II. AIDS-Related Research

On page 2 of appendix C of Dr. Ditzler's written testimony, we have listed the names of investigators and the approximate research funding available to them for AIDS-related research. The funding amounts to approximately $12 million spread over the next two or three years. The major areas covered by these projects are:

1. The secretory immune system with particular emphasis on immunoglobulin A, a protective component within the tears, salivary glands, intestinal lumen, genito-urinary tract and lungs. This Medical Center has provided world leadership in our understanding of immunoglobulin A. In fact, VAMC staff member Dr. Martin Heyworth and I are editors of the text Immunology of the Gastrointestinal Tract and Liver, a book that will be published shortly by Raven Press.

2. Function of T-lymphocytes, including both the CD4 lymphocytes attacked by the AIDS virus and CD8 lymphocytes, which may provide some immunity. Studies by our University staff have shown that the CD8 lymphocyte can inibit proliferation of the AIDS virus in a test tube.

3. The role of macrophages in HIV infection, which is currently being investigated by Dr. Timothy Meeker, a staff physician at our Medical Center and Dr. Michael McGrath, a researcher at the University of California - San Francisco affiliated San Francisco General Hospital. The macrophage study is particularly important, because it may explain how the AIDS virus can live protected within a macrophage for the lifetime of the patient.

4. Gene expression in tumor cells, the major thrust of our cancer research program.

5. Opportunistic infections. Dr. Robert Owen has provided world leadership in the study of human disease caused by microsporidium, and Dr. Walter Blumenfeld has developed an animal model for pneumocystis.

6. Trials with AZT and other drugs are presently being conducted at this Medical Center.

These projects provide an extremely broad and solid investigational base on which to build a sophisticated AIDS research center.

Dr. John Zeigler, our Associate Chief of Staff for Education, is Director of the UC-San Francisco AIDS Clinical Research Center, which encompasses all AIDS research at the UCSF campus, the VAMC, and San Francisco General Hospital.

III. Needs

Thirteen years ago, Dr. Rudi Schmid recognized there were a number of laboratories at the UCSF teaching hospitals engaged in liver research--but communication between the investigators was very inefficient. We, therefore, applied for and received a NIH grant for a center. Today that center leads the world in liver research.

We feel it is time to take the same approach to AIDS research. A center would require dollars to set up research core facilities, including equipment and personnel,to supply enrichment funds for education and visiting scholars and to provide pilot feasibility money for start-up funds to get new ideas off the shelf immediately and into the laboratory. The establishment of a center along the lines of the Liver Research Center mentioned above would draw into the circle first class investigators who may not necessarily be involved with AIDS research, but who will surely bring fresh new ideas to the overall research program.

IV. Summary of Progress and Hopes for the Future

Although we may be a long way from developing an effective vaccine for controlling this dreaded HIV infection, there are some rays of hope in an otherwise bleak picture. First, we have already isolated, cultured and cloned the virus. Its nucleic acids have been sequenced and its envelope protein isolated. These new advances are the first steps in developing a vaccine and, in fact, the first vaccine is being used on a trial basis. Second, there are at least two new drugs on the horizon which scientists feel may provide better viral inhibition than AZT with fewer side effects. Third, we have learned a great deal about how external secretions provide protection against the thousands of bacterial and viral species that enter our gastrointestinal tract and lungs each day. We now have considerable information on how the important protective protein, immunoglobulin A, is stimulated. Perhaps through oral vaccines, we can utilize this natural defense system to prevent the virus from entering the body. Finally, to me, the greatest ray of hope is the fact we are having Congressional hearings on this subject. This type of support is extremely gratifying for those who are on the front lines of AIDS research.

Appendix 1

August 21, 1987

Profile of the San Francisco Veterans Administration Research Service

Albert L. Jones, M.D.
Associate Chief of Staff for Research and Development

In the late 60's plans were under way to make the San Francisco Veterans Administration Hospital a dean's hospital, in other words to establish a formal association in patient care, teaching, research, and administration services with the University of California, San Francisco.

By June of 1968, a small group of physician-scientists made commitments to join the San Francisco Veterans Administration Medical Center from leading medical centers such as Harvard, Cornell and Columbia Medical Schools. These individuals, led by Dr. Marvin Sleisenger, Chief of Medicine, then set about in cooperation with various departments at the University to establish a first rate medical center. To do this, the rule was to recruit an individual to fill a position only if we could find the very best. The position would remain unfilled until we found an someone who could meet our rigorous standards.

I believe our efforts have been enormously successful. The medical students fight to come to the VA for their medical rotations. In 1968 the research projects of this Veterans Administration Medical Center were funded by less than a million dollars from all sources. By the mid 70's that figure had risen to approximately 4 million of which 75% was derived from funds through the VA research system. By the summer of 1987, the total amount of research funds has reached greater than $20 million a year, the largest total research budget of any VA medical center and one that even rivals most medical schools. Incidentally of the 20+ million, 7.4 million comes from the VA and approximately 13 million comes from other sources.

The number of principal investigators rose from less than 10 in 1968 to approximately 150 today. Of those 150, 105 are supported by the Veterans Administration as staff physicians or PhD career scientists. The most creative and novel program ever to emerge for physician-scientist training is the Veterans Admistration Career Development Award (CDA) System, of which there are 5 levels ranging from those who have had little or no experience in academic medicine to those who are internationally renowned full professors at major medical schools. Our VAMC leads the nation in career development awardees (33). As of my last survey, 85% of the individuals that have been trained since the late 1960's at this VAMC are in academic medicine--of which approximately one half remain in VA Hospitals. Of those who remain in academia, half are in positions of leadership as either chiefs of research institutions, chairmen of departments in medical schools or chiefs of services at VA or other federal institutions.

What caused this astonishing growth of research activities at this medical center? First, there are the VA investigators themselves. They are some of the most outstanding leaders in medical science in the United States,

and many are world leaders in such important areas as Gastroenterology, Endocrinology, Immunology, Cardiology, Oncology and Cell Biology. They are on editorial boards of a dozen or more journals. They are officers of at least 10 scientific organizations and are members of numerous scientific review boards throughout the world. Twenty-five are members of the two most prestigious medical societies in the world, namely the American Association of Physicians and the American Society of Clinical Investigation. Members of both societies are elected through a rigorous review of their contributions to medical science. We proudly boast that our VAMC has more individuals in these two societies than most medical schools in the country.

Second, VA funds have provided an exceedingly valuable and strong support base for individual investigators to establish programs and develop them to the point where they can be enlarged through extramural funds. Third, we did and still do enjoy strong support from the University of California, San Francisco and have exceptional VAMC leadership through Drs. Sleisenger, Way, Goldsmith and Ditzler, individuals who themselves are physician-scientists. Last, we also enjoy an unusual degree of camaraderie because of the great respect that the investigators have for each other. This has fostered close interaction between the investigators. In fact I do not know of any examples where a principal investigator is not in some way collaborating with at least one other principal investigator on this station. The research administration office rigorously fosters communication between appropriate scientists.

Are there areas of particular expertise at this medical center? Our research activities are extremely broad-based and many areas are particularly strong, as mentioned above. But because of our rapidly emerging interest in AIDS research, we could mention two important leadership areas.

Traditionally, the immunology section at this VA Hospital has been one of the strongest in the nation--beginning with Middleton-Award winner Norman Talal's research on helper T cells. Drs. Seaman and Wofsy now have a mouse model of lupus erythematosis, an autoimmune disease which can be deadly in humans. They can markedly lengthen the life of an animal with this disease using monoclonal antibodies against helper T cells. Further, this model may also serve as a model for AIDS research, since the depression of T cells is one of the principal features in acquired immune deficiency disease. Interestingly, the immunosuppressed mice do not seem to be as susceptible to opportunistic diseases as are AIDS patients.

Further, in 1972, Drs. Owen and Jones discovered a new cell in the human intestine which apparently plays a major role in sampling foreign material including viruses within the intestinal lumen. This new cell type has revolutionized the thinking among secretory immunologists of the world. It also may play a role in the entrance of HIV into the human body, since certain other viruses such as the Reovirus gain entry into the organism through this cell. Drs. Schmucker, Daniels and Jones are world leaders in immunoglobulin A processing and transport. Their work is presently being expanded to study the protective role that IgA production and secretion may have in preventing HIV infection.

Cancer research is a major thrust at this VAMC. The discovery of embryonic gene expression in leukemia cells has expanded our understanding of how stem cells lose growth control and become cancerous. Understanding how genes--especially oncogenes--are regulated may lead to future cures. Drs.

Nissenson and Strewler's discovery and sequencing of a protein secreted by cancer cells that elevates calcium levels has recently been the subject of an article in Science. This is a major observation and should lead to methods to control blood calcium levels and therefore give symptomatic relief in patients with cancer.

Dr. Kim holds a a prestigious Medical Investigator Award and has identified special surface antigens on colon cancer cells. This also is a highly significant observation which may lead to a cure for certain forms of colon cancer. If we can build antibodies against these surface antigens, we may be able to use them to selectively destroy the cancer cells.

Cell biologists (Drs. Burwen, Barker, Marti and Jones) are using the regenerating liver model to study regulation of cell growth. When 70% of a rat liver is removed, certain remaining cells undergo rapid division and grow at a rate greater than any cancer. As the liver reaches normal size, this growth spurt stops as fast as it began. New clues are beginning to shed light on this extraordinary growth regulation.

Under the direction of Dr. Ziegler, a massive program for AIDS research throughout the Bay Area has been organized. We now have about 25 laboratories engaged in some form of AIDS related research with approximately $12 million committed to this effort over the next several years. In addition, the VAMC is part of a large cooperative study testing AZT. Further we are in the process of applying for a VA Center Grant on AIDS Research and Education through the Veterans Administration.

We have made major advances in studies of opportunistic infections. Dr. Blumenfeld has developed an animal model of pneumocystis, a pathogen which infects the lungs of AIDS patients, which will allow us to work on a cure for this disease. Dr. Owen has demonstrated that microsporidium, an extremely rare organism which can only be identified by electron microscope, attacks and causes massive degeneration of absorptive cells in the intestine.

Dr. Meeker, working with a number of other investigators, has now demonstrated that the overall problem in the pathogenesis of AIDS may not be that the virus itself destroys CD4 lymphocytes but that the virus incorporates into macrophages, which in turn destroy all cells bearing the CD4 surface antigen. If this is correct, then the virus can remain protected from antibody attack while programming the macrophages to destroy the immune system. This would certainly explain why the development of an HIV antibody is essentially useless.

To help in our research efforts, the medical center has two major core facilities--Magnetic Resonance Imaging and Spectroscopy and Flow Cytometry and Cell Sorting. We are also in the process of developing a Molecular Genetic core.

In summary, the San Francisco VA Medical Center is an internationally known center of research excellence, making contributions that have changed the course of thinking in many areas. Its trainees have gone on to assume leadership roles across the United States. And--just as important--it has remained dedicated to the highest standard of "state of the art" patient care.

STATEMENT OF HERBERT A. PERKINS M.D.
Executive Director, Irwin Memorial Blood Bank, San Francisco

The Irwin Memorial Blood Bank is the not-for-profit community blood bank which supplies virtually all the blood components transfused in San Francisco and 7 other counties of Northern California.

Irwin's blood donors have all been tested for anti-HIV since March 5, 1985. Approximately 250,000 donations have been tested. The test appears to be remarkably effective in detecting carriers of HIV, and we are not yet aware of a case of AIDS among recipients transfused with our blood since March 5, 1985.

With the exclusion of donors from populations known to be at risk for AIDS, and the permanent deferral of donors with positive tests for anti-HIV and hepatitis, we are now screening a population at very low risk for AIDS. In such a population, the risks of a false-positive anti-HIV test result exceed the frequency of a true positive by a ratio of 2 to 3 to one. The Western blot test is used to distinguish true positives from false positives. Unfortunately, the Western blot test results in an equivocal pattern in about 10% of those positive in the initial screening test. Although we are convinced that almost all such equivocal results are false positives (based on our inability to culture the virus from such donors), we are not able to tell donors with equivocal results whether they are positive or negative. Moreover, many with negative Western blot tests persist in being weakly positive in the screening test, and must be permanently excluded as blood donors (according to guidelines of the federal Food and Drug Administration). Thus, we have the unenviable task not only of informing donors with true positive tests for anti-HIV that they are undoubtedly carriers of the AIDS virus but also of telling a still larger number that we don't know whether they are positive or negative, but that they must not donate blood for transfusion again.

The necessity for mandatory testing of prospective blood donors for anti-HIV is unquestionable, but our experiences make us equally convinced that mandatory testing in other situations should be avoided as much as possible. We have seen families destroyed, jobs lost, and children excluded from school because someone tested positive for anti-HIV. We have seen persons with no known risk for AIDS emotionally tormented because their test was positive (possibly falsely so). We believe strongly that no one should be tested for anti-HIV without his or her knowledge and permission, and that persons who have any likelihood of a positive result should not be tested without a complete understanding of the problems which can be encountered should their test be positive.

The largest source of expense in any program of testing for anti-HIV thus becomes the counseling costs. All persons being tested require some counseling prior to agreeing to be tested. Those persons whose tests are positive require hours of counseling, and often referral to agencies which can provide prolonged psychological or psychiatric support. We have found that we need to charge $40 a test to recover our costs when a person who thinks he or she may have been exposed to HIV requests a test. That charge includes repeating each positive screening test in duplicate, Western blots when either or both of the repeat tests are positive, as well as pre-test and post-test counseling.

The Irwin Memorial Blood Bank interacts with the Veterans' Administration Hospital at Fort Miley in many ways. We are the sole source of all blood components transfused by the VA in San Francisco. We provide consultative services, advice and educational materials for problems relating to Transfusion Medicine. As a Clinical Professor of Medicine at the University of California in San Francisco, I give lectures to the staff at Fort Miley.

Situated as we are in the city with the highest per capita frequency of AIDS of any large city in this country, it was inevitable that many recipients of blood from Irwin were infected with AIDS virus before anyone had recognized that AIDS was an infection that could be transmitted by blood transfusion. After the beginning of 1983, when steps were taken to eliminate donors from groups at risk for AIDS, the chance of infection by blood fell off very rapidly, but it was not until March 1985 that we had the test for anti-HIV. Using that test we were able to determine that as recently as the middle of 1984, 27 donors out of every 10,000 (i.e., 270 a year) were confirmed to be positive for anti-HIV. This frequency then fell steadily to its current rate of 3 per 10,000. Although the positive units are not transfused, the possibility that a negative unit might carry HIV is not zero, although it is extremely low. During the entire period from 1977 through the present, we estimate that several thousand recipients of Irwin blood were infected by HIV. This includes veterans transfused at Fort Miley. We are aware of 64 cases of AIDS attributable to transfusions, and another 125 who have anti-HIV with or without AIDS-Related-Complex. The period of highest risk was 1982-1983, and we have been encouraging all recipients of our blood between 1980 and March 1985 to get themselves tested. Obviously, testing of those recipients should not be mandatory and should be done only with pre-test counseling and consent.

We at Irwin are proud to be associated with the Veterans' Administration Hospital at Fort Miley. The hospital is a major asset to the community as a site of care of veterans, as an educator of physicians, and as a source of new information through its research programs.

SAN FRANCISCO AIDS FOUNDATION
333 VALENCIA STREET
FOURTH FLOOR
SAN FRANCISCO
CALIFORNIA
94103
415/864-4376

Thank you for the opportunity to give testimony to this committee regarding the medical care of AIDS and ARC patients with the Veteran's Administration. I worked with the Infectious Disease Team at the Veteran's Administration Medical Center in San Francisco, as a Social Worker. During that year, the team followed over 120 patients with AIDS and ARC. The previous year I worked within the Social Services Department of the San Francisco AIDS Foundation. This exposure, to services within the VA as well as the community, allows me a unique vantage point.

The needs of people who have AIDS and ARC are overwhelming, but I believe that there are a few pressing and serious concerns that demand immediate attention. I am not attempting to rank them in order of importance, since the individual need of any person is the most important to them.

The availablity of medical care to veteran's through the VA system is a benefit earned through service to one's country. However, it is my experience that many Veteran's are not aware that they can receive treatment for AIDS/ARC within the VA. So while the VAMC here in San Francisco is seeing over 150 patients currently, I believe there are at least that many individuals in the community that are eligible for care here and do not utilize the services. If any outreach or education were done, the response would be dramatic.

It is my experience that the care given to AIDS/ARC patients at the VAMC in San Francisco is excellent and comparable to services provided in other hospitals. It is well known that the cost of care for AIDS/ARC patients is considerably higher than for other illnesses, yet there have been few special allocations to provide for these increased costs. Nothing illustrates this more effectively than the cost of the drug AZT. At a yearly estimated cost of between $8,000 - $10,000 per patient, it is clear that there could well be a burden on any provider who attempts to make this drug available. Many veteran's who had never before sought services at VAMC San Francisco, did so once they became aware of the fact that AZT was available to them.

In the early stages of the illness, most patients recover from individual infections and can return home. However, each infection takes its toll and patients eventually reach the point that they need extended care. This extended care is made available to patients with other illnesses, through six month nursing home contracts, which the VA pays for.

In the case of the patients with AIDS/ARC, there are virtually no nursing homes that accept them, in large part because the reimbursement is not adequate. The impact of this situation is crucial to consider, because these patients remain in acute care beds until their death. Not only is this fiscally draining, the patient suffers from not being in an environment more appropriate to their needs. Until this situation changes, more pressure needs to be placed on the VA system to make space available in the Nursing Home and Extended Care Units within the VA, for these patients.

The epidemic is expanding, no one disputes that. The demand upon the VA system will continue to grow as the epidemic does. Even in San Francisco, a community reputed to have one of the most extensive support systems available to people with AIDS/ARC, services lag behind demand. There are needs for housing, drug treatment, mental health services, to name but a few. The agencies in San Francisco are already operating beyond their capacity.

Without additional funding, they will not be able to expand their services. Federal funds need to be allocated immediately to ease the burden on local communities and to help provide the quality of life that people who have been stricken with AIDS/ARC deserve.

Sincerely,

Michele M Carstens, MSW

Michele Carstens, M.S.W.
Social Worker
Client Services Department

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